Quality First: Arizona's Early Learning Quality Improvement and Rating System Implementation and Validation Study

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Executive Summary

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First Things First was created to help ensure Arizona's children enter kindergarten healthy and ready to succeed. First Things First is a partner with other agencies in creating a family-centered, comprehensive, collaborative and high-quality early childhood system that supports the development, health, and early education of all Arizona's children through age 5.

One of First Things First's signature strategies is Quality First, a voluntary Quality Improvement and Rating System (QIRS)¹ intended to support the development of a high-quality early childhood system. Quality First partners with child care and preschool providers to improve the quality of early learning across Arizona. The system assesses providers on evidence-based indicators of quality, funds supports to help providers enhance the quality of their programs, and then publicly rates providers on a five-tier scale. There are five quality improvement services that Quality First offers to participating early care and education (ECE) programs: coaching, assessment, financial incentives, specialized assistance, and professional development.

One of the core values of First Things First is continuous quality improvement in both its programs and operations. Based on the recommendation of the First Things First Research and Evaluation National Advisory Panel, in September 2015 First Things First contracted with Child Trends, a national research organization, to conduct a comprehensive evaluation of Quality First. The evaluation serves as the first phase of a three-phase project. In this first phase, the goals were to provide a review and analysis of Quality First to inform implementation and continuous improvement of the initiative. Specifically, there were three goals of the Phase I study:

Goal 1: Conduct a review of Quality First's conceptual framework and program design to understand the system's benefits and challenges from the perspective of participants, leadership, and other stakeholders.

Goal 2: Assess the Quality First data system.

Goal 3: Conduct a validation of the Quality First Rating Scale (1 to 5 stars) to examine if the rating is working as expected and whether it distinguishes between different levels of quality.

Recognizing the diversity of Quality First program participants and stakeholders, the study sample included urban, rural, and tribal programs, as well as a variety of ECE program types including child care centers and homes. The study used mixed methods including surveys of stakeholders and Quality First participants, observations of program quality, focus groups, interviews, and document review to collect information from a variety of perspectives.

¹ Quality Rating and Improvement System (QRIS) is the general term used nationally to refer to quality improvement frameworks like Quality First. Note, however, that Quality First prioritizes the improvement function over the rating function and is branded as a Quality Improvement and Rating System.

Quality First at a Glance

Following a 2-year planning and pilot phase, Quality First was fully implemented as a QIRS in 2011. The number of programs that can participate in Quality First in any given year depends on program resources available in each region of the state, as determined by regional councils comprised of diverse community leaders.

At the time of this evaluation, there were approximately 960 ECE programs participating in 27 out of 28 First Things First regions throughout the state, which represents about 32 percent of the ECE programs in Arizona. Participating ECE programs receive a range of supports that are based on their star level rating and size. There are five integrated components of Quality First:

- Assessment Quality First participants receive a star rating based on the results of several
 assessments. Assessment results are used to help programs identify areas of strength and
 improvement, and Quality First coaches use the results of assessments to guide specialized
 assistance that supports quality improvement.
- Coaching Quality First coaches provide individualized guidance and support, monthly onsite
 visits, targeted training and technical assistance (TA), and support in goal development and
 implementation. One- and 2-star rated programs receive 6 hours of onsite coaching, and 3- through
 5-star rated programs receive 4 hours of onsite coaching.
- Specialized Assistance Quality First participants have the option to receive regular onsite visits from a child care health consultant (CCHC).² Depending on the funding plan created by the First Things First Regional Partnership Council, participating providers also may have access to mental health consultants and inclusion coaches. The technical assistance specialists work with the Quality First coaches as part of a collaborative approach when working with programs.
- Professional Development Staff in Quality First programs have access to professional development
 opportunities through the Arizona Early Childhood Career and Professional Network. These
 opportunities and resources include college scholarships, a workforce knowledge and competencies
 framework, and an early childhood workforce registry. In some regions, Professional REWARD\$ are
 offered as well, which are financial incentives for teachers and caregivers in Quality First who stay
 for at least a year in their current job and have taken at least 6 hours of early childhood college
 coursework.
- Incentives Quality First's statewide financial incentives include funding to purchase materials and
 equipment for the classroom and a 50 percent reduction in state licensing fees. Funding levels for
 materials and equipment are determined by rating level and program size, and materials are ordered
 through the Quality First coach, based on the quality improvement plan goals identified by each
 program. Program size is determined by the number of children enrolled. Family child care programs
 are not assessed by size, and instead, their incentive amounts are determined by star level rating.

In addition to improving the quality of ECE programs, First Things First works to increase young children's access to quality child care and preschool. Depending on regional funding, scholarships are available to help children in families earning up to 200 percent of the Federal Poverty Level access high-quality ECE programs. With few exceptions, the scholarships may only be used at Quality First participating providers who have met or exceeded quality standards (3- to 5-star rating). Although the Quality First Child Care scholarships are not a standard component of the Quality First model, they have become an incentive for ECE programs to participate in Quality First and to work on meeting quality levels.

² A child care health consultant is a nurse or professional health educator who has completed specialized training based on the most recently established best practice standards.

Quality First Star Rating Process

As Quality First intentionally emphasizes the *improvement* portion of their QIRS, participating regulated center-based and family child care programs in Arizona are assigned a public rating ranging from 1 to 5 stars after participating in the program for approximately 1 year. Programs must achieve a specific number of points on each of the individual criteria within each star level to be awarded a rating at that level (see Exhibit 1 below). For example, to earn a 3-star rating, programs must meet certain thresholds on three assessment tools, which are described below.

Quality First ratings are based on assessments from three tools:

- Environment Rating Scales (ERS) are used to assess components of a program's learning environment— such as arrangement of indoor and outdoor space, materials and activities, and use of language—on a 1 to 7 scale. There are three ERS used in Quality First: Early Childhood Environment Rating Scale-Revised (ECERS-R), which is used in center-based preschoolaged classrooms; the Infant-Toddler Environment Rating Scale-Revised (ITERS-R), which is used in center-based infant and toddler classrooms; and the Family Child Care Environment Rating Scale (FCCERS-R), which is used in family child care programs.
- Classroom Assessment Scoring Systems™ (CLASS™)
 examines the quality of the interaction between
 teachers and children. Quality First uses the
 CLASS Pre-K in classrooms for 3- and 5-year-olds,
 which includes three domains: emotional support,
 classroom organization, and instructional support.
 Quality First uses the CLASS Toddler in classrooms
 for toddlers, which includes two domains: emotional
 and behavior support.



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Quality First Points Scale (QFPS) assesses three additional components of quality: Staff
Qualifications, Administrative Practices, and Curriculum and Child Assessment. For each of these
domains, programs can receive up to 6 points on a 0 to 6 scale.

Programs are initially assessed using the ERS, and if they score a 3.0 or higher, they are assessed using the CLASS and the QFPS. If programs score lower than a 3.0 on the ERS, they would be rated a 1- or 2-star. If they score a 3.0 or above on the ERS, CLASS and QFPS information is gathered and used to determine their final rating.³

³ Head Start and some nationally accredited programs enter Quality First on an accelerated assessment schedule. They are not assessed on the ERS unless they fail to score at certain levels on the CLASS.

Exhibit 1 below shows how the scores from these three instruments are combined to assign a star rating at each of the five levels.

Exhibit 1. Quality First process for determining star ratings



		STAR RATINGS		
RISING STAR Committed to quality improvement	PROGRESSING STAR Approaching quality standards	QUALITY	QUALITY PLUS ** ** ** ** Exceeds quality standards	HIGHEST QUALITY
ERS Average Program Score	ERS Average Program Score	ERS Average Program Score	ERS Average Program Score	ERS Average Program Score
1.0 - 1.99	2.0 - 2.99	3.0 - 3.99 No classroom score below 2.5	4.0 - 4.99 No classroom score below 3.0	5.0 and above No classroom score below 3.0
CLASS [™] Average Program Score N/A	CLASS [™] Average Program Score N/A	CLASS [™] Average Program Score ES 4.5 CO 4.5 IS 2.0	CLASS [™] Average Program Score (ES 5.0 CO 5.0 IS 2.5	CLASS [™] Average Program Score (ES
Quality First Points Scale N/A	Quality First Points Scale N/A	Quality First Points Scale 6-point minimum SQ AP CA 2	Quality First Points Scale 10-point minimum SQ AP CA 2	Quality First Points Scale 12-point minimum SQ AP CA 4
ERS = Environment Rating Scales ECERS: Early Childhood Environment ITERS: Infant/Toddler Environment FCCERS: Family Child Care Environment ITERS: Infant/Toddler Environment ITERS: Infant/Toddle				

Source: First Things First, 2017

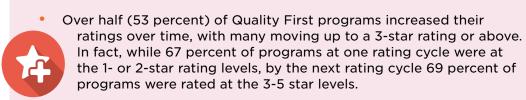
Key Findings in Brief

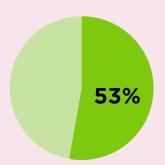
The implementation and validation study analyzes multiple sources of evidence including Quality First materials, surveys, interviews, observations, assessments, and administrative data. The study was conducted with currently enrolled and rated Quality First programs: licensed center-based programs, family child care programs and tribal programs, including those that are Head Start and nationally accredited.

The findings address the effectiveness of the Quality First rating tool overall, and if it is working well to distinguish levels of quality. In addition, the study evaluated the implementation of Quality First, including the design of the system, quality improvement supports and participants' experiences. Lastly, a review of the

data system was conducted to evaluate if the existing structure and data collection efforts are effective in supporting program management and improvement efforts.

Quality First programs improve their quality over time, but additional supports could promote improvements on the quality assessments and further movement in quality levels.





Over half (53 percent) of Quality First programs increased their ratings over time, with many moving up to a 3-star rating or above.

 The CLASS and QFPS scoring criteria appear to be challenging for 2-star programs to meet, while the ERS and CLASS scoring criteria appeared to be challenging for 3- and 4-star programs to meet.

Quality First ratings distinguish meaningful levels of quality. Minor revisions could improve the assignment of programs to different levels.

- Higher star rating levels were generally associated with higher scores on the various tools used
 to measure quality, with patterns generally holding for both family child care and center-based
 programs. Overall, significant differences were found between ERS mean scores as well as the QFPS
 scores at the low (1- and 2-star), medium (3-star), and high (4- and 5-star) rating levels. In addition,
 higher-rated programs scored significantly higher on two out of three CLASS domains (Emotional
 Support and Classroom Organization).
- The Quality First rating scale differentiates between levels of observed quality. Using the ECERS-3 as an independent measure of quality, programs with higher star rating levels generally had higher ECERS-3 scores as well. ECERS-3 scores were significantly higher in high-rated levels than in medium- and low-rated levels, although the difference between medium- and low-star rated programs was not significant.

Higher star rating levels were generally associated with higher scores on the various tools used to measure quality, with patterns generally holding for both family child care and center-based programs.



Key Findings Cont.

• Lower-rated Quality First programs (1- and 2-star) may be able to meet some of the QFPS requirements for higher star levels (3-, 4-, and 5-star). Using director and teacher survey data, we explored how these programs might meet specific requirements on the QFPS and found that most were already meeting certain requirements (e.g., years of experience, ratios, curriculum and assessment).

Quality First stakeholders and participants have generally positive perceptions of the system. More training and outreach for programs could help provide clarity on expectations for participation and use of assessments to inform ratings.

Perceptions of the Quality First components are generally positive, although more training or professional development is needed to support TA providers in helping programs interpret and use assessment results. Financial incentives were seen as beneficial for participants, but there may need to be more flexibility in how programs can use these incentives.

There are opportunities to strengthen engagement and outreach to participants to support continuous quality improvement.

• There are opportunities to strengthen engagement and outreach to participants to support continuous quality improvement. While there appeared to be a shared understanding about the overall focus of the system, there was less clarity around expectations for participation in Quality First.

Quality First data processes are implemented with rigor. Communications about the purpose and use of data could strengthen the process.

- Data collection methods are thorough and the Quality First data system meets stakeholders needs. However, there was less understanding among Quality Coaches compared to other staff about why they are required to collect certain data. In addition, Quality First participants may need more information to explain why specific data are being collected from their programs and how it will be used. More clarification around reasons for data collection efforts is needed to help both participants and stakeholders.
- Sufficient data are being collected to meet the current needs of Quality First, but additional data (i.e., child and family level data, provider data) would need to be collected or linked to if First Things First wanted to engage in further validation studies or an outcome evaluation.

Overall, the findings in this report can be used to inform continuous improvement of Quality First. The Quality First rating tool is functioning as expected in differentiating levels of quality; however, additional quality improvement efforts could be developed to support Quality First participants in continuing to achieve higher ratings. While the system's data collection

Quality First ratings distinguish meaningful levels of quality.

methods are thorough and strong, Quality First could provide more technical assistance to stakeholders about why certain data are being collection and how it is used. The findings from the review of the



system design suggest potential changes to increasing access to more specialized technical assistance, and providing additional training or professional development to participants on how to better interpret and use their assessment results. In addition, there are opportunities to strengthen Quality First's engagement and outreach to providers to support program participation.

Study Goals and Key Findings

Goal 1: Review of Quality First's system and implementation

The purpose of this component of the study was to examine Quality First's system design and identify stakeholders' perceptions of the benefits and challenges of system activities including quality improvement supports, engagement and outreach, and data collection procedures and processes. Child Trends conducted surveys and interviews with First Things First leadership staff, technical assistance (TA) providers and supervisors, and Quality First participants, as well as ECE providers who are not currently participating in Quality First. Specifically, this goal was designed to:

- 1. Examine how Quality First is implemented, and what perceptions stakeholders have about Quality First processes and intended outcomes.
- Determine what adjustments could be proposed to the Quality First model to improve implementation based on the experiences of system stakeholders and comparisons to ECE system best practices.

Key findings:

Perceptions of Quality First components are generally positive across stakeholder groups, but there is room for improvement.

- The professional development activities provided by coaches are beneficial to program quality. However, coaches identified that a major challenge was they are stretched for time and find it difficult to meet all the professional development needs of the participants. In addition, most coaches reported that they deviated from the number of required coaching hours, spending either additional or fewer required onsite hours, depending on the needs of a participant. Coaches may need more flexibility to identify the appropriate number of coaching hours for each program, rather than using a set number. Coaches may also need more support to help them individualize the professional development and TA they provide to better meet programs' needs when there is limited time available.
- Specialized assistance (CCHCs, mental health consultants, and inclusion specialists) is a valuable component of Quality First. With regard to CCHCs, not all program participants understood that CCHCs could do more than provide basic health and safety consultation. More communication around the services provided by CCHCs would help participants better understand this type of assistance and could increase their use. Participants that received support from mental health and inclusion specialists accessed that support frequently, with these specialists visiting their programs multiple times per month. However, mental health consultants and inclusion specialists are only available depending on regional funding, and thus are not available to all Quality First participants. First Things First could examine whether there are ways to make these services more widely available to all Quality First participants.
- Quality assessments provide a concrete way to identify areas of program improvement. Almost all Quality First stakeholders and TA providers agreed that the quality assessments conducted as part of the Quality First rating process provided a concrete way to identify areas of program improvement. However, participants reported having difficulty applying the results in their program. When asked about barriers to achieving a higher star rating, the CLASS assessment score, staff turnover and staff qualification requirements were reported as the top challenges by directors and teachers. In particular, teachers found it difficult to implement the teaching practices measured by the CLASS. First Things First may want to consider providing additional training or professional development to TA providers to help them more effectively work with participants on how to interpret and use the CLASS assessment results. Additionally, more support could be provided to program directors and staff to help them better understand the approaches that the assessment tools measure, and to inform continuous quality improvement.

- Financial incentives are beneficial, yet Quality First policies can make them difficult to use. Quality First stakeholders (i.e., TA supervisors, regional council directors, and leadership staff) agreed that financial incentives were beneficial, however about one third felt that higher-rated programs did not need the amount they currently receive. On the other hand, directors in higher-rated programs (4-and 5-star) reported that a lack of available financial resources to use for professional development, education or training, was a barrier to increasing staff qualifications. This may be a result of restrictions and lack of flexibility around how the Quality First incentives can be used. For example, 1- and 2-star programs can only purchase approved resources and materials with their financial incentives, and these purchases must be made through their coach. First Things First may want to offer tiered approaches to financial incentives, particularly with 3- to 5-star levels, as well as provide more flexibility to programs in what the funds can be used for to help remove barriers.
- Quality First child care scholarships, while not a part of
 the standard financial incentives provided to all Quality
 First participants, was reported as one of the top
 reasons programs decided to apply for participation
 in Quality First. While scholarships were equally valued
 across star-levels, programs located in rural areas of
 the state were more motivated by scholarships than
 programs located in urban areas. Scholarships may
 provide a more stable source of revenue for rural
 providers who have fewer families in their local area or
 who may serve families with lower incomes.

There are opportunities to strengthen Quality First's engagement and outreach efforts with providers to support program participation.

 Expectations for participation in Quality First are not always clear. While there appeared to be a shared understanding about the overall focus of the system,



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- there was less clarity around expectations for participation in Quality First. Additionally, only a little more than one-third of directors felt that their experience in Quality First was what they initially expected. As a result, First Things First may want to provide more information up front about the expectations for participation in Quality First.
- System implementers reported challenges with collaboration among TA providers (i.e., coaches, assessors, CCHCs) as a major challenge in helping Quality First participants learn and improve.
 Efforts could be made to improve communication and collaboration among TA providers to further support quality improvement in programs.
- Clear expectations and a readiness assessment were identified as activities to support program
 participation. Respondents indicated that assessing a program's level of readiness to participate
 in quality improvement activities and providing clear expectations regarding the application and
 selection process were two activities that could support program participation.
- Most ECE providers who were not participating in Quality First had heard of Quality First. Half of
 those ECE providers had heard about it from another ECE provider and half had reported that their
 program was considering participating. However, one of their top reasons for not participating was
 that they did not have sufficient information to decide. ECE providers also reported that their region
 currently had a wait list for Quality First. Overall, the findings indicated a need for more clarity and
 communication around Quality First—both what it is and what participants can expect.
- In general, directors were more positive in their beliefs and perceptions of Quality First than teachers. This may be a result of Quality First supports being more targeted at the program level than the classroom level, and therefore teachers may not always see the direct benefits of their participation. Thus, it may be important to focus on ensuring all staff within a program are ready for participation in Quality First instead of just the directors or leadership.

Goal 2: Review of the Quality First data system

This purpose of this component of the study was to review the Quality First data system to determine whether the existing data elements and infrastructure support effective program management, program evaluation, and quality improvement. Child Trends conducted a review of the Quality First data system, the Extranet, and supporting documentation, and interviewed and surveyed First Things First leadership staff, and TA providers and supervisors. Child Trends also conducted focus groups and observations of TA providers. Specifically, this goal was designed to evaluate whether the existing data elements and infrastructure support effective program management, program evaluation, and quality improvement.

Key findings:

The Quality First Extranet data system is a strong technology on par with recommendations for the functions and categories of data that should be included in QRIS.

• The Extranet data system is a strong technology with its primary function is as an accountability system, with a secondary function to support case management. However, if First Things First was interested in further strengthening the system, they could consider conducting a usability study to identify specific areas of the Extranet that may lack ease of functionality.

Data collection methods are thorough and the Quality First data system meets its stakeholders needs, however more clarification about reasons for data collection efforts is needed.

- **Documentation for the data system is thorough and available to staff.** There is a high level of standardization (i.e., implementation of data-related processes developed by Quality First administration staff at First Things First) of the data collection and entry procedures within Quality First. This is especially true for the assessment process, which could be used as a model for making the coaching and CCHC processes even more standardized.
- Quality First participants and Quality coaches may need more information about why specific data are being collected. Furthermore, there was less understanding among Quality coaches compared to staff in other roles about why they are required to collect certain data. In addition, Quality First participants may need more information to explain why specific data are being collected from their programs and how it will be used. First Things First could review expectations of data collection and enhance communication with Quality First TA providers, especially Quality coaches, about the importance of data collection and how data can be used to enhance their work could help improve understanding. Additionally, more communication as well as professional development and training for Quality First participants is needed to explain the connection between data being collected and their eventual ratings.

Quality First focuses its data collection on program and classroom level elements that relate directly to the rating and improvement system.

- Enhanced data collection that includes information about the children and families served in Quality First could support future evaluations. While there is a wealth of information available about programs and classrooms that can be used by First Things First to complete internal evaluations and monitor the Quality First strategies and components, no data are being collected about the children and families being served by programs participating in Quality First. A plan to enhance data collection could outline a high-priority short list of data elements about children and families that could be collected systematically in programs including demographic characteristics such as race/ethnicity and family income status and/or the option of assigning school identifiers to children that would allow for tracking child-level data longitudinally among children in Quality First rated programs.
- First Things First could consider collecting and/or linking to other data elements to better
 understand Quality First participants. For example, collecting and/or linking to practitioner data
 from a different data system, like a workforce registry, would provide information about the impact
 of the ECE workforce in Quality First programs.

Goal 3: Validation of the Quality First Star Ratings

The purpose of this component of the study was to assess the validity of the Quality First ratings. Specifically, the goal was to examine if the ratings are working as expected and whether they distinguish between different levels of program quality. Child Trends analyzed Quality First administrative data, and conducted classroom observations using the CLASS in 1- and 2- star programs, and the ECERS-3 (serving as an independent measure of quality) in programs at all star levels. This goal was designed to:

- 1. Examine how Quality First standards are measured, how they fit together to form a rating, and whether the rating is functioning as expected.
- 2. Examine whether ratings in the current framework differentiate higher quality ECE programs from lower quality programs, and how ratings and observed quality vary across different program types.

Because programs' ratings are linked to the receipt of financial incentives and scholarships, it is important to ensure that the rating process works to sort programs into meaningful quality levels.

Key findings:

Most programs (94 percent) in Quality First are rated between 2- and 4-stars, with few programs rated at the 1- or 5-star levels, regardless of their geographic location or program type.

Quality First programs increased their ratings over time, with many moving up to a 3-star or above.

In general, over half (53 percent) of all programs increased in their star ratings from the previous rating cycle to the most current, mostly by one star rating level. Arizona defines quality programs as those that have 3 or more stars. The majority of programs that moved up increased from approaching quality levels (1- and 2-star) to quality levels (3-, 4-, and 5-star), indicating that they were making the necessary improvements needed to reach quality, as defined by the State.

The Quality First rating scale is differentiating between levels of observed quality.

• Overall, higher ECERS-3 scores were observed in programs at higher star rating levels. ECERS-3 scores were significantly higher in high-rated programs (4and 5-star) than in medium- (3-star) and low- (1- and 2-star) rated programs. While other differences beyond those measured by the ECERS-3 may distinguish low and medium levels of quality, it will be important to consider options to strengthen the 3-star rating given the role it plays as the entry point to higher levels of quality in Quality First.

Quality First measures (i.e., ERS, CLASS, QFPS) are contributing to an overall picture of quality in programs.

 Statistical analyses indicated that the measures Quality First uses to create a program's rating were measuring similar aspects of quality, yet without the tools overlapping or duplicating each other.



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Higher star rating levels were generally associated with higher scores on the various quality elements, with patterns generally holding for both family child care and center-based programs.

- As expected, higher star rating levels were associated with higher ERS mean scores, finding significant differences between low (1- and 2-star), medium (3-star) and high (4- and 5-star) rating levels.
- Higher rated programs scored significantly higher on the CLASS Emotional Support (ES) and Classroom Organization (CO) domains. Small, unexpected differences were noted for the CLASS

Instructional Support (IS) domain, such that the mean scores for programs with a medium star rating level were significantly lower than low star level programs (though high star level programs scored significantly higher than medium and low star level programs as predicted).

 In general, low, medium, and high star level groups were significantly different from one another on QFPS scores.

Lower rated Quality First programs (1- and 2-star) may be able to meet some of the QFPS requirements for higher star levels (3-, 4-, and 5-star).

- Lower rated programs do not receive the QFPS as part of their rating. Using director and teacher survey data from 1- and 2-star programs, we explored how these programs might be meeting specific requirements and criteria on the QFPS.
- Most 1- and 2-star survey respondents reported already meeting certain QFPS requirements at the higher star levels (e.g., years of experience, ratios, curriculum and assessment).
- First Things First may want to consider having some of the QFPS components be part of the rating
 at all star levels instead of only at higher star levels (3-, 4-, and 5-star). For instance, including
 requirements or points on administrative practices and staff qualifications may be components
 to consider adding at all rating levels as the components provide a strong foundation for quality
 improvement.

The CLASS and QFPS scoring criteria appeared to be challenging for 2-star programs to meet, preventing them from reaching the next level, while the ERS and CLASS criteria appeared to be challenging for 3- and 4-star programs to meet.

- A large portion of 3-star programs did not score high enough on the ERS and the CLASS
 Instructional Support requirements to reach a 4-star level, indicating that the practices assessed
 to achieve higher scores on these tools are challenging for 3-star programs. The QFPS total points
 requirement also prevented many programs from attaining a 4-star rating, although no one element
 of the QFPS proved more difficult than others. Similar trends were found for 4-star programs moving
 up to a 5-star rating, although the Administrative Practices element appeared to be easier for 4-star
 programs to meet compared to the other QFPS elements (i.e., Staff Qualifications and Curriculum
 and Assessment).
- To help programs meet criteria needed to achieve higher star ratings, First Things First may want to
 offer targeted support to programs at different star levels. Programs at all star levels appear to need
 support on teacher child interactions, as measured by CLASS. Programs at the higher levels need
 supports for increasing ERS scores. Moreover, more TA could be provided around identifying barriers
 to staff improving their educational qualifications.

Overall, findings from the Quality First validation analyses are consistent with other recent validation studies including those in California, Delaware, Minnesota, Oregon, Rhode Island and Wisconsin, which all reported significant relationships between ratings and an independent measure of program quality. The Quality First Rating tool is working to differentiate quality, particularly between the medium (3-star) and higher star levels (4- and 5-star). The practices assessed by the CLASS and the ERS are challenging for programs to demonstrate; programs may benefit from additional supports on each of these tools. Lower star-rated (1- and 2-star) programs have strengths that are not recognized by the current rating tool and may be able to meet requirements for higher star level programs.

Study Limitations

There were a few limitations to this study. First, all surveys were only made available online and in English. Second, the Quality First program leadership interviewees were selected based on their specific roles in Quality First, so their opinions might not represent the entire system. For the validation study, the ECERS-3, which was used as an independent measure of quality, can only be used for preschoolaged, center-based classrooms, so the study did not have an independent measure of quality in toddler classrooms or family child care homes. Third, the CLASS data came from a combination of data collected by First Things First and Child Trends. Finally, study participation rate was lower than desired in tribal programs despite targeted efforts to include those programs.

Conclusion

The findings in this report can be used to inform continuous improvement of Quality First. The findings from the review of the system design recommend ways to increase access to more specialized technical assistance and provide additional training or professional development to participants on how to better interpret and use their assessment results. In addition, there are opportunities to strengthen Quality First's engagement and outreach to providers to support program participation. While data collection methods are thorough and strong, Quality First should provide more technical assistance to stakeholders about why certain data are being collected and how it is used. The validation study findings do not suggest major changes are needed to the Quality First rating scale, as it is functioning as expected in differentiating levels of quality. There is, however, a need for additional quality improvement efforts to support Quality First participants in continuing to achieve higher ratings.



Quality First: Arizona's Early Learning Quality Improvement and Rating System Implementation and Validation Study

Introduction

The Arizona Early Childhood Development and Health Board, also known as First Things First, was created to help ensure Arizona's children enter kindergarten healthy and ready to succeed. First Things First partners with other agencies in creating a family-centered, comprehensive, collaborative, and high-quality early childhood system that supports the development, health, and early education of all Arizona's children through age 5.

One of First Things First's signature strategies is Quality First, a voluntary Quality Improvement and Rating System¹ intended to support the development of a high-quality early childhood system. Quality First partners with child care and preschool providers to improve the quality of early learning across the state. The system assesses providers on evidence-based indicators of quality, funds supports to help providers enhance the quality of their programs, and then publicly rates providers on a 5-tier scale. Quality First offers five quality improvement services—coaching, assessment, specialized assistance, professional development, and financial incentives—to participating early care and education (ECE) programs. With improvement at the forefront of this work, First Things First designed Quality First as a system of services, where every component is an equally important contribution to the overall goal of the system.

First Things First contracted with Child Trends to conduct an evaluation of Quality First. The evaluation served as the first phase of a 3-phase project. In this first phase, the goals were to provide an objective and comprehensive examination of Quality First's conceptual framework, design, and implementation. Phase One also included an analysis of the Quality First rating scale that can be used to inform implementation and continuous improvement of the initiative. The evaluation used mixed methods including surveys of stakeholders and Quality First participants, observations of program quality, focus groups, interviews, and document review to collect information from people with a variety of perspectives. The evaluation design also recognized the diversity of participants and stakeholders in Quality First and used intentional sampling strategies to ensure representation across regions and program types. The second phase of this project will include an examination of the Quality First program components, and the third phase of the project will examine how Quality First is supporting children's development.

Components of a QRIS

Nationally, Quality Rating and Improvement Systems (QRIS) typically include five components: quality standards (the practices that define quality in programs and that programs work to achieve), quality improvement supports, financial supports and incentives, system monitoring and accountability

¹ Quality Rating and Improvement System (QRIS) is the general term used nationally to refer to quality improvement frameworks like Quality First. Note, however, that Quality First prioritizes the improvement function over the rating function and is branded as a Quality Improvement and Rating System.

(including the process to issue quality ratings and operate the QRIS), and engagement and outreach (including the strategies to disseminate the ratings to parents and other consumers). The structure and details of each component vary widely across state QRIS, and there is no single evidence-based model of QRIS. Rather, like Quality First, QRIS across the nation are engaged in ongoing evaluation and continuous improvement activities to identify the implementation structures and practices that support desired outcomes of the system.

In the Quality First evaluation, we used the five QRIS components as a structure for organizing the research questions and evaluation activities. Figure 1 provides an overview of the approach for Phase One of the Quality First evaluation. It details three primary activities for the evaluation: an evidence review to situate Quality First in the context of other QRIS nationwide and to serve as a foundation from which the quality standards and implementation practices could be assessed; an implementation analysis that examined Quality First's conceptual framework and activities from multiple perspectives; and, a validation analysis that assessed the extent to which the Quality First rating scale was differentiating quality levels in a meaningful way.

Figure 1. Quality First evaluation activities and alignment with general QRIS components (Phase One)

General QRIS Components	Corresponding Quality First Components	Evaluation Activities
Quality standards	Assessment	Evidence review^
		Validation analysis to assess how Quality First rating indicators are functioning and linked to external observations of quality^
Quality Improvement supports	Coaching	Evidence review*
	Specialized assistance	Implementation analysis to
	Professional development	understand perceptions of professionals delivering quality improvement supports and experiences of participating providers*
Financial supports and	Financial incentives	Evidence review*
incentives		Implementation analysis to assess structure and delivery of Quality First incentives*
System monitoring and	Quality First leadership staff	Evidence review^
accountability	Quality First Extranet	Implementation analysis of the Quality First Extranet^
		Validation analysis to assess effectiveness of the Quality First rating structure^

General QRIS Components	Corresponding Quality First Components	Evaluation Activities
Engagement and outreach	Quality First leadership staff	Evidence review*
	Regional Councils	Implementation analysis of strategies used to engage providers and provider perceptions of Quality First*

^{*} indicates activities addressed in the Goal 1; ^indicates activities addressed in Goals 2 and 3

Though the terms used in Quality First differ slightly from the general terms in Figure 1, the intent was to provide a larger QRIS framework within which the evaluation could be grounded. These terms also facilitate comparison of Quality First to other QRIS nationally.

Why now is the time for an evaluation of First Things First

Following a 2-year planning and pilot phase, Quality First was fully implemented as a QIRS in 2011. Quality First is a voluntary system and has been implemented across 27 out of 28 First Things First regions, with approximately 960 participating ECE programs throughout the state, which represents about 32% of the ECE programs in Arizona. Participating ECE programs receive a range of supports that are based on their star level rating and program size.

Quality First is at a point in implementation that is ideal for an evaluation and validation of its system. In 2012, First Things First convened an Early Childhood Research and Evaluation National Advisory Panel, comprised of experts from the field of early care and education, that provided recommendations to their Board, including developing a 5-year First Things First Research and Evaluation Plan. One recommendation as part of this plan was to conduct a multi-phase Quality First Implementation and Validation Study.

Starting in the summer of 2015, Child Trends was engaged to conduct the first phase of the implementation and validation study. Phase One of the study had three main goals: (1) review the conceptual framework and system design of Quality First and recommend refinements to the current model as needed; (2) review the Quality First data system, and related databases, to determine if the existing data elements and infrastructure support effective program management, program evaluation, and quality improvement of the QIRS process; and (3) validate the Quality First Star Rating Scale (1 to 5 stars) to determine whether the 5 tiers represent distinct levels of quality. Findings from each of the three goals are presented in the chapters below.

Chapter 1: Quality First Implementation Evaluation

Danielle Hegseth, Dale Epstein Ph.D., Tracy Gebhart, Anne Partika, Claire Lowe, Jennifer Wenner, Kathryn Tout, Ph.D.



Overview

The purpose of this component of the study was to examine Quality First's system design and implementation. For this implementation evaluation, Child Trends conducted a systematic review of Quality First's conceptual framework, including an examination of each quality component. We also wanted to understand the benefits and challenges experienced by the system's participants, leadership, and other stakeholders, and to offer a set of recommendations for system improvement.

This evaluation was designed to address two main research questions, with additional sub-questions:

- 1. What perceptions do Quality First system stakeholders have about Quality First processes and intended outcomes?
 - What do stakeholders believe to be the overall goal of Quality First, the facilitators of achieving these goals, and the common challenges to success?
 - What are the similarities and differences in key stakeholders' understanding of the Quality First system design and intended outcomes?
 - What are ECE providers' motivations for participating in Quality First?
- 2. Based on the experiences of Quality First system stakeholders and comparisons to ECE system best practices, what adjustments could be proposed to the Quality First model to improve implementation?
 - What are the benefits and challenges of each component?
 - How do the five Quality First components currently function independently and interact in combination to produce desired multilevel outcomes? How could these functions change or be improved?
 - What are the common facilitators of participants' success in Quality First? What are common challenges to their success?

Study design and procedures

To address the research questions, we used a mixed methodology for the system design evaluation. This included conducting interviews, surveys, and a review of Quality First documentation. Interviews were conducted with 20 Quality First stakeholders, including First Things First leadership staff, regional council directors, and technical assistance (TA) supervisors. In addition, Quality First TA providers, who included coaches, coaching supervisors, Child Care Health Consultants (CCHCs), CCHC supervisors, assessors, lead assessors, and assessor supervisors, completed an implementation survey. The survey was designed to understand TA providers' perceptions of Quality First's activities and intended outcomes, how Quality First components operate and impact participants' experiences, the benefits and challenges of each Quality First component, and what improvements could be made to the Quality First system model.

Directors and teachers participating in Quality First completed surveys (one for directors and one for teachers), which were developed to provide further insight on participants' perceptions of the benefits and challenges of each Quality First component, the effectiveness of each component in improving program quality, what improvements to the system are needed, and experiences with facilitators of and barriers to success in Quality First. Additionally, ECE providers who are not currently participating in Quality First completed a survey about their perceptions of and the barriers to their participation in Quality First, as well as incentives and other motivations that would drive them to participate. Lastly,

Quality First documents were reviewed to learn more about the conceptual framework for the system, as well as each of the five main components offered to participants (coaching, assessment, specialized assistance, professional development, and financial incentives).

Findings

Quality improvement supports

- Respondents felt that the professional development activities coaches provide are beneficial to improving program quality. One major challenge identified was that coaches had difficulty finding time to meet all the professional development needs of the participants.
- Almost all coaches reported deviating from the number of required coaching intensity hours.
 Most coaches reported that the reasons for deviating were in response to requests from teachers for extra information, training, or a specific request for extra time.
- There was a high level of agreement that the specialized TA (CCHCs, mental health consultants, and inclusion specialists) were valuable components of Quality First.
- Almost all Quality First stakeholders and TA providers agreed that the assessments provide a
 concrete way to identify a program's level of quality, but that participants have difficulty
 interpreting and using the results. Both the Classroom Assessment Scoring System (CLASS) and
 staff qualifications elements of the Quality First rating scale were perceived as top barriers by
 directors and teachers to achieving a higher rating.

Financial supports and incentives

 While respondents agreed that financial incentives were beneficial, about one third of respondents felt that higher rated programs may not need the level they currently receive.

Engagement and outreach

- Quality First stakeholders, implementers, and participants indicated that they have a shared understanding about the overall focus of the system, but there is less clarity for stakeholders, implementers, and participants around expectations for participation in Quality First.
- Respondents indicated that assessing a program's level of readiness for change and providing
 clear expectations regarding the application and selection process are two activities that could
 support program participation in the quality improvement process.

Research Synopsis of Quality First's Components

As an initial step in the system design evaluation, the Child Trends research team synthesized research evidence about Quality Rating and Improvement System features and summarized trends in state QRIS. The purpose of this synthesis was to situate Quality First within the context of other QRIS nationally. Additionally, this research synopsis provided evidence to support the recommendations for improvements and refinements to Quality First's conceptual framework and design.

To complete this research synthesis, Child Trends first reviewed the main components and structural elements of Quality First: Coaching, Assessment, Specialized Assistance, and Professional Development, and Financial Incentives (see Figure 2). Second, building on existing literature reviews and projects that have already been conducted – either by the Child Trends team or others in the field, on topics such as quality improvement, coaching, and QRIS – a research synopsis was written for each Quality First component. It is important to note that there are limited studies that have examined the individual features or dimensions of a typical QRIS, which often make it difficult to draw conclusions about a specific feature or component. However, whenever possible, this review of the evidence related to a specific Quality First component was presented.

Figure 2: Quality First component overview



Third, to understand how Quality First operates compared to other QRIS nationally, data were pulled and analyzed from the web-based QRIS compendium (QRIScompendium.org) using data from October, 2015. Data elements relevant to the review were downloaded and recoded, as necessary, prior to running descriptive statistics. Overall, the dataset contained data from 40 QRIS though the number of QRIS with data on each element varies. We used the compendium data to compare Quality First to three groups of QRIS: (1) all systems, (2) those with hybrid rating structures (similar to the structure used in Quality First), and (3) systems that use both the Environment Rating Scales (ERS) and the Classroom Assessment Scoring System (CLASS) observational tools of assessment. Using these data, the Child Trends team examined how the Quality First model and components align with QRIS in other states, both at the overall structural level (e.g., blocks, points, hybrid), as well as at the component or indicator level (e.g., the verification process, staff qualification indicators, etc.). It should be noted that while this

² QRIScompendium.org is a web-based catalog of data elements collected from state and local QRIS via interview and self-report. The site can produce data matrices that allow comparison of QRIS features across systems.

review compares Quality First with other QRIS nationally, it is not intended to "rank" or "evaluate" the different systems. Instead, it provides examples for comparison. For each of the five Quality First components, a short description is provided, followed by a synopsis of the research and a comparison between Quality First and other QRIS.

Quality First coaching

The term coaching is often used interchangeably in the ECE field with other terms such as TA, mentoring or consultation to describe a range of individualized quality improvement approaches used in a QRIS. In 2011, the National Association for the Education of Young Children (NAEYC) and the National Association of Child Care Resource and Referral Agencies (NACCRRA, now called Child Aware) proposed a set of definitions to help clarify and differentiate these terms for the field. Coaching, as defined by NAEYC and NACCRRA (2011) is "provided by someone with specific expertise working with an early education program on implementing specific practices." For purposes of this chapter, and to align with terminology used in Quality First, we use the term coaching to describe approaches used within a QRIS directed at helping ECE staff implement practices within classrooms or home-based programs, specifically for the purpose of staff improving their direct work with children (Isner et al., 2011; Tout et al., 2011). Coaching practices commonly involve someone with training and expertise in the specified area in which they're providing support (Zaslow, et al., 2012).

Synopsis of research

Coaching is a critical part of a QRIS. In a recent review of the evidence on coaching, studies suggest that coaching does improve early educators' practices as well as child outcomes when the coaching is directed at improving classrooms or home-based groups³. Many coaching studies evaluate models that include the development of trusting relationships, collaborative development of goals and action plans, observation, self-assessment, reflective practices, modeling, evaluation, and feedback. Overall, there are mixed results in terms of classroom, teacher, and child outcomes. It is evident across some of these studies that coaching is not necessarily associated with gains in knowledge on a particular topic (ex. problem behaviors, social-emotional development, pre-literacy, language), but it does seem to be more likely associated with significant improvements in the structural environment and/or instructional practices.⁴ There are mixed results in terms of the impact of coaching interventions on child outcomes, with some showing small but often not significant gains compared to control groups.⁵

While coaching can be positively linked to changes in quality and children's development, not all coaching models are effective. In a cross-site evaluation of the Early Childhood Educator Professional Development project, studies with rigorous evaluation methods that incorporated coaching models found the following characteristics to have greatest effects on program quality and children's development:

³ Isner et al., 2011; Tout, Isner & Zaslow, 2011

⁴ Boller, et al., 2010; De Grosso, et al., 2010; Bryant et al., 2010; Wesley et al., 2010; Buysse, Castro, & Peisner-Feinberg; Garet et al., 2008; Neuman & Cunningham, 2009; Neuman & Wright, 2010; Powell, et al., 2010; Pianta, et al., 2008

⁵ Bryant et al., 2010; Wesley et al., 2010; Buysse, Castro, & Peisner-Feinberg; Garet et al., 2008; Wasik & Hindman, 2011

⁶ Tout et al. 2009

Selection and hiring of TA providers and coaches. How coaches are selected and trained within a QRIS are critical activities to the success of carrying out a quality improvement initiative as they are the personnel directly working with the centers and homes. Specifically, for effective quality improvement implementation, emerging evidence suggests coaches have at least a bachelor's degree, as well as experience working in early childhood programs.⁷

Ongoing training and reflective supervision of coaches. Since quality improvement activities are ongoing in a QRIS, the training for coaches also needs be available in a continuous way. Smith and colleagues recommend that ongoing training be tailored to meet the individual's needs, with routine assessment of the coaches to provide further support when necessary. Additionally, reflective supervision of the coaches, which refers to the oversight of coaches by a TA supervisor or agency, is recommended to ensure that the coaching services are being delivered effectively. While there is limited evidence on reflective supervision, and it can be challenging for a QRIS to adequately supervise all the coaches, emerging research indicates that it is important to identify resources to support coaches in a QRIS.

Coaching dosage that is appropriate for the program's goals. Dosage refers to the amount or quantity of coaching that is provided to a particular program, center, or staff member in a QRIS. It is measured by the frequency of the assistance provided (i.e., how often the coach meets with the center teachers or director) and the length of the on-site visits or sessions. While a review of the literature found substantial variation in the duration and intensity (the number of hours within a given timeframe) of the coaching provided by effective programs, in general the longer the duration and the greater the frequency of coaching when it was appropriately matched to the program's goals resulted in improvements in quality.

Coaching strategies that can be individualized to meet program needs. Within a QRIS, many coaching models allow for the flexibility of a coach to individualize their approach when working with a center or home to meet each program's individual needs. Individualized work with programs includes the ability to use specialized strategies to support quality improvement efforts while working within a program model and timeline. The majority of QRIS and quality improvement initiatives that have been evaluated point to a number of strategies that can be used in conjunction with one another to individualize coaching. These strategies include:

- assessment of a classroom and teacher's skills
- creation of goals or a quality improvement plan
- coach modeling of techniques/skills (through video or in-person)
- provision of feedback
- evaluation of teachers' implementation of practices (sometimes done through video recordings)
- observation of providers and classroom setting
- helping teachers develop strategies for dealing with difficult situations
- collaborative problem solving, and
- promotion of reflective practice

⁷ e.g., Koh & Newman, 2009; Tout et al., 2009; Zaslow, Tout, & Halle, 2012

⁸ Smith et al., 2012

⁹ Isner et al., 2011

¹⁰ e.g., Assel, Landry, Swank, & Gunnewig, 2007; Boller, Blair, De Grosso, & Paulsell, 2010; De Grosse, Hallgren, Paulsell & Boller, 2010

Comparison of coaching activities used in Quality First and other QRIS

Quality First's coaching model includes individualized guidance and support, monthly onsite visits, targeted training and TA, and support of goal development and implementation. Participating sites are assigned to a coach through one of four coaching agencies, which implement the services. Quality First participants will then receive 4 or 6 hours of onsite coaching per month, depending on their star rating. Coaching is ongoing, based on program need. The coaches help participants identify and set goals for quality improvement, and provide access to financial incentives and other resources as they relate to each participant's individual goal(s). Quality First coaches are trained through the Quality First Academy to provide targeted TA and support to participants.

The TA activities that are part of Quality First's coaching component are similar to the requirements in other QRIS. For example, like Quality First, most QRIS (74%) have a standardized process for TA, meaning it follows a particular model or process with designated steps and assessment of progress (QRIScompendium.org). As part of this process though, the intensity and duration of technical TA varies, with no QRIS requiring only a specific time period of coaching or assistance to a program (e.g., six months). Additionally, almost all QRIS (77%) require training certification for their coaches or TA providers.

Some states, like Kentucky, offer general coaching like Quality First does, which is aimed to broadly support a program's quality improvement. In contrast to this more general approach to coaching, some states provide specific coaching to help programs apply for a QRIS rating. Georgia's Child Care Resource and Referral consultants, for example, focus their work on helping program directors and programs complete the online application and prepare for an onsite visit. Some states provide coaching specifically focused on instructional support. Minnesota, for instance, offers coaching to rated programs to help them improve teacher-child interactions.

Quality First assessment

An essential step to determining the quality of a program and assigning a rating within a QRIS is to engage in a process of documenting and verifying the quality standards. QRIS vary in the tools and processes that are used to document and verify quality standards. QRIS may include scores from on-site observations using nationally-recognized tools (such as the ERS and CLASS) or self-developed tools and checklists, review of documentation submitted by ECE programs to demonstrate how quality standards are being met, and program self-report of quality standards.

Synopsis of research

Both the ERS and the CLASS are widely used and accepted as reliable measures in assessing observed program quality. Within the context of a QRIS, CLASS observations have been shown to distinguish among meaningful differences in quality that support learning and predict positive child outcomes. The ERS are used in QRIS in a variety of ways. In most, the scales are used as a key observational instrument to assess the quality of daily practices and the classroom environment.

1.

¹¹ Sahol et al. 2013

Comparison of assessments used in Quality First and other QRIS

Quality First's rating assessment tools include the ERS, CLASS, and the Quality First Points Scale (QFPS), all of which are included in a participant's star rating calculation. One- and 2-star programs are reassessed every 12 to 14 months; and 3- to 5-star programs are reassessed every 24 to 26 months. An ERS assessment is typically done for the initial and every subsequent rating reassessment for all programs except those that are nationally accredited. If a program receives an ERS rating of 3.0 or higher, then they are assessed using the CLASS and QFPS. If programs score lower than a 3.0 on the ERS, they would be rated as a 1- or 2-star. If they score a 3.0 or above on the ERS, CLASS and QFPS information is gathered and used to determine a final rating. A program must score at or above certain levels in each domain of the CLASS (i.e., 4.5 on emotional support and classroom organization, and 2.0 on instructional support), score at least 6 points on the QFPS (2 in each domain, staff qualifications, administrative practices and curriculum and assessment) to be rated as a 3-star or higher. Quality First assessors are trained to reliability on each tool per the requirements of each tool's author and assessors' reliability is intermittently monitored to avoid reliability drift.

The majority of QRIS initiatives use one or more of the Environment Rating Scales as an indicator or observed program quality. According to the 2015 QRIScompendium.org, 29 out of 40 (73%) of QRIS use the ERS in their child care centers for infants and toddlers, and 27 (68%) use the tool to observe preschool classrooms. Additionally, 63% (25 QRIS) use the ERS to measure observed quality in family child care homes for both infants and toddlers as well as for preschool aged children. Predominately, the ERS scores are used to determine a program's rating in a QRIS (67% for child care centers and 54% for family child care homes).

The CLASS is another observational tool frequently used by QRIS, although it is used less often than the ERS. According to the QRIScompendium.org, 9 out of 40 (23%) QRIS use the CLASS in their child care centers for infants and toddlers, and 16 (40%) use the tool to observe preschool classrooms. Additionally, 13% (5 QRIS) use the CLASS to measure observed quality in family child care homes for both infants and toddlers as well as for preschool aged children. When used, the CLASS scores help determine a program's rating in a QRIS (31% for child care centers and 13% for family child care homes). In Quality First, the CLASS measure is used only if a program has met initial thresholds on the ERS. This practice is unique nationally.

While use of the CLASS and ERS is common nationally, some states are piloting self-developed tools. For example, Ohio developed an observation tool to use in their QRIS (no data are available yet to examine the effectiveness of the tool). In addition, North Carolina is currently leading a consortium of states with funding from the Race to the Top- Early Learning Challenge grant in the development of a new measure called EQuIPS (Early Childhood Quality Improvement Pathway System). This measure is intended to specifically assess program quality within a QRIS, measuring quality at the program level rather than the classroom level. EQuIPS is currently in its first pilot phase and will be used in multiple states once developed.

Another feature of the Quality First assessment process is the QFPS, which is administered only for programs eligible for the three-, four-, and five-star levels. While few other QRIS have named their point

¹² For more information about EQuIPS: https://earlylearningchallenge.nc.gov/nc-star-rated-license-program-quality-measurement-development

systems (i.e., called it a "scale"), the content and structure of the QFPS is similar to point systems in other states. The QFPS includes three main content areas: staff qualifications, administrative practices, and curriculum and child assessment. Almost all QRIS include staff education and training in both center-based (87% and 90% respectively) and family child care programs (77% and 79% respectively). However, there is variability in the standard for achieving the highest QRIS level (QRIS Standards and Criteria, QRIS Resource Guide,

https://qrisguide.acf.hhs.gov/files/chapters/QRISRG_Chapter_4_Standards.pdf). Many QRIS have a bachelor's degree as the highest level for center-based teachers. About 30% of QRIS have a bachelor's degree as the highest level for family child care providers, with a CDA or state credential more often being the highest level. However, Quality First is unique in that is also includes years of experience as an indicator for its programs (though some QRIS do set eligibility criteria related to years of operation for programs or, for staff, number of years in a program). Further, more than half of all QRIS require a professional development plan, whereas Quality First does not. For more information on Quality First professional development requirements, please refer to the Professional Development section below.

The category of administrative practices includes a variety of indicators that address program management. These can include program administration and management features (e.g., staff retention, staff evaluations and meetings, handbooks and written operating procedures, group or individual supervision), and leadership indicators (e.g., director qualifications or credential, administrator self-assessment). Quality First also includes ratio and group size when measuring administrative practices (which is not typical in other QRIS). About one third of all QRIS, including Quality First, incorporate the state licensing ratio and group size standards into their rating. Typically, the base rating is the state licensing standard and then a program can receive a higher rating as the ratio and group size numbers become more stringent. For example, Kentucky uses the state licensing requirement for the first QRIS level, but requires a more stringent ratio and group size for level three (QRIS Standards and Criteria, QRIS Resource Guide,

https://qrisguide.acf.hhs.gov/files/chapters/QRISRG_Chapter_4_Standards.pdf). Another common way that ratio and group size are assessed is by using the NAEYC accreditation standards (26%, of QRIS include accreditation for center-based programs). Other types of administrative indicators that are common in QRIS include staff evaluations (62% of all other QRIS for center-based programs), and written operating policies and procedures (64% of all other QRIS center-based programs).

The final domain of the QFPS is focused on curriculum and child assessments features. Like Quality First, the majority of QRIS have their curriculum indicators aligned with the state Early Learning Guidelines for center-based programs (64%), and 79% of center-based programs for QRIS that use both the ERS and CLASS observational assessment tools. This alignment is true as well for the child assessment indicators, although only about half of all other systems, including Quality First, align child assessments with the Early Learning Guidelines. Approximately half of QRIS center-based programs, including Quality First, have requirements that the child assessments are used to guide individualization and curriculum planning. On the other hand, while Quality First requires this for family child care programs as well as center-based programs, this is less common with other QRIS, with only about a third of QRIS having an indicator about child assessment for family child care. Some QRIS have incorporated indicators around working with culturally diverse populations within their curriculum and assessment standards. For

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¹³ There is recent data indicating that the number of QRIS requiring family child care programs to use child assessments to guide individualization and curriculum planning has increased by a lot since the 2015 QRIS Compendium was completed.

example, New Mexico has built in a requirement for programs to include multicultural practices, such taking into account a child's native language(s) when conducting assessments or with lesson planning (QRIS Standards and Criteria, QRIS Resource Guide,

https://qrisguide.acf.hhs.gov/files/chapters/QRISRG_Chapter_4_Standards.pdf).

Quality First specialized assistance

Specialized assistance is a type of TA or coaching that is focused on a specific topic or content area and intended to target a specific area for improvement.

Synopsis of research

There is a limited amount of literature that specifically focuses on the association between specialized assistance and program and child outcomes. The studies that have been conducted primarily focus on mental health or behavior management strategies. ¹⁴ Several of the studies focus on targeted specialized assistance aimed at specific children. For example, in a study conducted by Perry and colleagues, individualized mental health consultation was delivered to individual providers who had identified children in their classrooms with problem behaviors. 15 This included observing the children and providing strategies to the providers, which resulted in significant decreases in problem behaviors and an increase in social skills. Other studies have focused on trainings for the providers to work on behavioral management techniques for the classroom. Additionally, Schollter and Peltier conducted an intervention using Behavior Management Consultants that worked either one-on-one with teachers to develop intervention plans for specific children with identified problem behaviors, or with a group of teachers. 16 Both types of interventions were found to improve chronic behavior problems for the children, but the teachers who received one-on-one consultations had children that showed greater change. Other research has focused on using specialized assistance to teach providers strategies that can be used at a classroom or program level rather than strategies targeted to specific children. Raver et al. (2008) provided teachers in the study with behavior management training and mental health consulting, and found that those teachers scored higher on emotional climate and responsiveness to students, and lower on harsh negative practices using the CLASS assessment tool compared to those in the control group. 17

Comparison of specialized assistance used in Quality First and other QRIS

Quality First's statewide specialized assistance includes child care health consultants (CCHCs). Participants have the option to receive regular onsite visits from these consultants, as needed. A CCHC is a nurse or Professional Health Educator who has completed specialized training based on the most recently established best practice standards. CCHCs provide health and safety trainings and can have joint meetings with a program's coach. Other states, like North Carolina, have a strong network of CCHCs that support child care centers by providing health and safety education through onsite or telephone TA. However, this support is not part of their QRIS, as it is in Quality First. In addition to Arizona offering further specialized assistance by using CCHCs along with coaches, some providers, based on the services available through funding from regional councils, also have the option to use mental health consultants and inclusion coaches.

¹⁴ e.g., Perry et al., 2008; Raver et al., 2008; Schottle & Peltier, 1996

¹⁵ Perry et al., 2008

¹⁶ Schottle & Peltier, 1996

¹⁷ Raver et al., 2008

The majority of QRIS across the country have some type of specialized TA focus. For example, of the 40 QRIS, 31 have a focus on health and safety, and 27 have a focus on inclusion (QRIScompendium.org). Additionally, 31 QRIS provide TA on improving teacher/child interactions, and 29 have a focus on infant/toddler care. However, it is not known whether this specialized TA is part of the standard coaching process, or if it is through specialized quality improvement assistance providers, like Quality First's structure. Some states have put in place relationship-based professional development services that are delivered through community-based organizations like child care resource and referral agencies (CCR&Rs) to help programs meet specific QRIS standards. For example, North Carolina aligned all of their TA activities delivered by the CCR&Rs to their QRIS standards (QRIS Provider Incentives and Support, QRIS Guide, https://qrisguide.acf.hhs.gov/files/chapters/QRISRG_Chapter_6_Incentives_Support.pdf).

Quality First professional development

The term professional development can be used to describe a range of activities. Professional development (PD) activities include training, coursework, group meetings, or resource sharing all aimed at improving the level of an ECE provider's skills, knowledge, or behaviors in the classroom and when working with children.

Synopsis of research

The broader literature largely shows that teachers who participate in a professional development activity or course further benefit from having strong support from a coach or consultant specifically working with them on the newly learned skill or concept. Furthermore, NAEYC has developed a set of principles for effective professional development, which Quality First has used as an evidence base for their professional development activities. These principles state that:

- PD is an ongoing process;
- PD should be grounded in theoretical and philosophical bases and structured as a systematic program;
- PD should be in response to an individual's background, current role, and experiences.;
- PD should promote a link between theory and practice;
- PD implementer should have knowledge and experience base;
- PD should involve an active, hands on approach. Interaction should be encouraged and students should learn from each other;
- PD should acknowledge the skills students bring and promote positive self-esteem;
- PD should provide opportunity for students to apply what they have learned, be observed, and receive feedback;
- Students should be involved in their PD planning.

Comparison of professional development activities used in Quality First and other QRIS

In addition to the individualized support provided by Quality First coaches, programs have access to additional professional development opportunities through the Arizona Early Childhood Career and Professional Network. The Network is a registry that allows members to keep a record of their education and professional development credentials, while also providing access to these opportunities through

¹⁸ Buysse, Castro, & Peisner-Feinberg (2010); Campbell & Milbourne, 2005; Cusumano, et al., 2006; Garet et al., 2008; Landry, et al., 2006; Neuman & Cunningham, 2009; Neuman & Wright, 2010; Whitaker, et al., 2007

college scholarships, a workforce knowledge and competencies framework, and to other resources. In some regions, Professional REWARD\$ are offered as well, which are a limited number of financial incentives for teachers and caregivers in Quality First who stay for at least a year in their current job and have taken at least six hours of early childhood college coursework.

QRIS across the country engage in a range of professional development activities. Most QRIS include directors, providers, and teachers in their professional development indicators (92% centers and 90% family child care homes). Typically QRIS include specifications around the number of required hours of professional development, using the licensing requirements as the baseline number and 15 hours per year as the requirement at the highest rating level (QRIS Standards and Criteria, QRIS Resource Guide, https://grisguide.acf.hhs.gov/files/chapters/QRISRG Chapter 4 Standards.pdf). The most prominent features of professional development that are considered in a QRIS are education and training of staff (ranging from 71%-100%). Typically, a QRIS will use some type of financial incentive such as a scholarship, to help program staff increase their level of education or early childhood training. At least 18 QRIS have some type of scholarship, with the most common one being the T.E.A.C.H. scholarship (Austin, Whitebook, Connors, & Darrah, 2011). Other states, like North Carolina, in addition to having T.E.A.C.H. scholarships, also provide salary supplements (NC WAGE\$) for teachers who meet certain educational criteria. While not a feature for Quality First, professional development plans are quite common in other systems across the country (62% for centers and 51% for family child care homes). Some states for instance, require individualized professional development plans as part of their rating (e.g., Georgia and Rhode Island). In Georgia's QRIS, Bright Stars, they require a written individualized professional development plan for each participating program, which specifies goals for required training in certain content areas or domains and for a specific number of hours. While the content of the professional development varies across QRIS in different states, the most common trainings focus on orientation to the QRIS (31%) and to the ERS (33%), health and safety practices (31%) and general business practices (28%).

Quality First incentives

Incentives, both financial and non-financial, are an important part of a QRIS. They can be both a motivation for a center or family child care home to choose to participate in the system and a support for sustaining program quality enhancements. In this section, we present a synopsis of the research findings on financial incentives, and a comparison of incentives used in the Quality First model and in other QRIS.

Synopsis of research

Many QRIS include incentives for participation and quality improvement. These incentives can be used broadly (e.g., a bonus for attaining a particular QRIS rating level) or for specific reasons (e.g., receiving a quality grant to support the purchase of new materials). Across the 40 states, all QRIS offer some type of financial incentive; however, the range of financial awards varies greatly¹⁹ and there is little empirical research supporting the impact of incentives and identifying the incentives that are most effective.²⁰ A recent study examining the association between program quality and quality improvement supports, including financial incentives, found that teacher scholarships used as an incentive was significantly related to improved quality in centers.²¹ However, the authors note that the analyses could not

¹⁹ Tout et al., 2010

²⁰ Boller, Tarrant & Schaack, 2014

[🖰] Yazejian & Iruka, 2014

distinguish the effects of the funding amounts and whether the higher amounts of financial incentives were more or less beneficial to the centers. Additionally, the association between teacher scholarships and program quality may have been a result of the fact that higher quality programs may be in a better position to receive and use these types of supports compared to lower quality programs. Overall, there is a lack of evidence regarding the impact of incentives, including which incentives are most effective to improve program quality and support children's outcomes.²² There is, however, research suggesting that access to financial incentives, such as scholarships, is a primary reason motivating programs to participate in a QRIS.²³

The 2010 Compendium of QRIS (Tout et al., 2010) provided a description of different types of incentives offered through quality improvement initiatives and how funds are used to support quality improvement. Incentives may be offered at the program- or provider-level and may be financial or non-financial (Tout et al., 2010). Financial incentives within a QRIS can be used in many ways with different requirements on how they are spent. For example, financial incentives may be spent on enhancing the program space (e.g., upgrading the playground), paying for staff professional development (training, workshops, credential courses, college credits), purchasing curriculum and materials, or funding daily program operations. These incentives can include:

- quality awards or bonuses for achieving or sustaining quality;
- tiered child care subsidy reimbursement with increasing amounts based on quality level
- participation or enrollment awards;
- scholarships for higher education;
- wage and retention awards;
- grants for specific program improvements.

Non-financial incentives are also frequently offered as a way to improve program quality. These can include:

- opportunity to improve services for children and families,
- publicly available rating that recognizes quality,
- free or low cost training,
- one-on-one consultation or coaching,
- opportunities for leadership or peer learning,
- marketing materials,
- · free or subsidized curriculum and assessment materials,
- free or subsidized classroom materials,
- free or subsidized outdoor play equipment,
- free or subsidized technology advancements, and
- networking opportunities.

Comparison of financial incentives used in Quality First and other QRIS

Quality First's statewide financial incentives include funding to purchase materials and equipment for the classroom and a 50% reduction in the DHS licensing fee. Funding levels for materials and equipment are determined by star-level, and actual materials are ordered through the Quality First coach, based on specific goals for the program's quality improvement as outlined in the quality improvement plan (QIP).

²² Boller, Tarrant & Schaack, 2014

²³ Cleveland et al., 2013

The intent is to offer incentives that are most beneficial to improving program quality as delineated in the QIP. Financial incentives range from \$1,050 to \$11,400 for child care centers and family homes. Family homes can receive up to \$1,425 if they are rated as 5 star, and larger child care centers (151+ children) can receive anywhere from \$8,400 for a 1- or 2-star rating to \$11,400 for a 5-star rating. Additionally, Quality First offers a select number of Quality First Child Care Scholarships to help families with the greatest need afford enrollment in Quality First child care centers and family homes that have quality (3-star or higher) ratings.

All QRIS provide some type of financial incentive as part of their model (QRIS Financial Incentives, QRIS Guide, https://qrisguide.acf.hhs.gov/files/QRIS_Financial_Incentives.pdf). This could include tiered subsidy reimbursements – like the Child Care Quality First Scholarships – which is the most common type of incentive offered by more than 15 QRIS. Minnesota recently conducted an evaluation of their Early Learning Scholarships Program, which provides scholarships to low-income families to increase access to high-quality ECE programs (Minnesota Department of Education, 2016). Results indicated that parents experienced a high level of satisfaction with the scholarships, and felt it gave them access to high quality ECE programs (note that the Early Learning Scholarships can only be used in higher rated programs).

Additionally, several states, including Arizona, provide some type of grant or funds to programs for quality improvement purposes. For example, Delaware's Stars for Early Success provides grants to centers and homes based on program type, size and rating level, that can be used to provide materials or professional development to staff. Similarly, Quality First offers funds based on star rating level and program type (child care center and family home). The average amount of incentives for lower-rated and smaller programs in other QRIS is around \$1,500, which is comparable to Quality First.²⁵ However, Quality First is unique in its financial incentives for higher rated and larger programs. While the average amount of higher improvement grants for other QRIS is \$5,409, Quality First's financial incentive is more than double that. There are some quality improvement efforts that have similar incentive amounts for participating programs. Success By 6, a quality improvement effort in Pennsylvania designed to raise programs from a 2- to 3-star rating in Pennsylvania's Keystone Stars QRIS, provides an average of \$10,000 in program improvement funds (PIF) to participating centers. A study evaluating the effectiveness of Success By 6 found that most the time these funds were used to purchase materials for play and learning (65% of items requested), with the second most requested purchases being health and safety items (20%). Ninety percent of center directors identified the PIF awards as helpful in making quality improvements (Warner-Richter, Lowe, Tout, Epstein, & Li, 2016).

Summary of QRIS Components

Overall, the Quality First model and its five main components are similar in structure and operations to other QRIS nationally. As with other QRIS, Quality First uses a standardized coaching process that allows for some variation in the intensity and duration of coaching based on programs' star level. It is common, as is the case with Quality First, that QRIS require specific training for their coaches. Like Quality First, some QRIS offer more generalized coaching; however, other states offer more focused coaching efforts, supporting activities specifically aimed at helping programs prepare for their rating assessments. Most QRIS use the ERS to assess program quality, with the CLASS being used less frequently, but still is a

²⁴ 1- and 2-star rated programs can order materials totaling up to \$8,400, while 3-, 4-, and 5-star programs receive checks for their incentive amounts.

²⁵ QRIScompendium.org, 2014

common assessment tool. While it is not common for states to have named their point system (like Quality First does with the QFPS), the content and structure of the QFPS is common to other administrative practice quality indicators in other QRIS.

All QRIS provide some type of financial incentive to their participating programs. Some states, like Arizona, provide incentives such as scholarships to support access to ECE programs, as well as grants or funds to support quality improvement efforts. While these efforts are more common, Quality First is unique in that its quality improvement supports for higher rated and larger programs is more than double the average amount for highest rated programs in other QRIS.

Most QRIS have some type of specialized assistance; however, it is not clear if this specialized assistance is done through the standardized coaching process or through specialized TA providers, like Quality First. Quality First has specialized TA providers that work with programs when needed in addition to coaches who are assigned to specific programs. Lastly, most QRIS offer professional development to programs and include specific quality indicators in their rating scale focused on directors, teachers, and providers. Like Quality First, these professional development indicators include specifications around the required number of training hours for staff.

System Design Evaluation Methodology

The purpose of the system design evaluation was to conduct a systematic review of Quality First's conceptual framework, including an examination of each quality component. Additionally, the aim was to understand the system's benefits and challenges as perceived by the system's participants, leadership, and other stakeholders, and to offer a set of recommendations for system improvement.

This chapter presents findings from the system design evaluation based on quantitative and qualitative data gathered from First Things First staff, grantees, regional council directors, Quality First participants, and ECE providers that do not currently participate in Quality First.

The system design evaluation employed multiple methods to assess the implementation of Quality First's design and conceptual model, including its five components, in order to make recommendations for improvement to the model. Specifically, the evaluation examined the benefits and challenges of each of the five quality components, as well as the similarities and differences in Quality First stakeholders' understanding of the system's processes and intended outcomes. Data collection methods included interviews, document review, and surveys to collect information about how Quality First is working across the state. In addition, a synopsis of the available evidence and comparison to other QRIS was used to provide a foundation for the evaluation's findings and design considerations.

These evaluation activities answered research questions about the effectiveness of each component in supporting participants' quality improvement, how well stakeholders understand the system and its intended outcomes, and possible improvements that could be considered for the Quality First model.

Research questions

The overall purpose of the system design evaluation is to review the conceptual framework and design of Quality First, and develop refinements to the system's model. The research team developed individual research questions based on preliminary recommendations from First Things First. Two main research questions, with additional sub-questions, were used to evaluate the Quality First system; these were:

- 1. What perceptions do Quality First system stakeholders have about Quality First processes and intended outcomes?
 - What do stakeholders believe to be the overall goal of Quality First, the facilitators of achieving these goals, and the common challenges to success?
 - What are the similarities and differences in key stakeholders' understanding of the Quality First system design and intended outcomes?
 - What are ECE providers' motivations for participating in Quality First?
- 2. Based on the experiences of Quality First system stakeholders and comparisons to ECE system best practices, what adjustments could be proposed to the Quality First model to improve implementation?
 - What are the benefits and challenges of each component?
 - How do the five Quality First components currently function independently and interact in combination to produce desired multilevel outcomes? How could these functions change or be improved?
 - What seems to be contributing most to participants' success or what are common facilitators of participants' success in Quality First? What are common challenges to their success?

Data collection

To address the research questions, a variety of data collection and analytic methods were used with a range of Quality First stakeholders and participants. These methods included interviews and surveys²⁶ as well as a review of the Quality First participant guide, assessment operations manual, points scale guidance document, and preliminary recommendations from the First Things First Research and Evaluation National Advisory Panel. In addition, a review of Quality First's administrative ratings assessment data was conducted to describe program characteristics and evaluation findings by star level. To ensure a sample that was similar to the Quality First population recruited for this evaluation, respondents included four main groups: Quality First stakeholders, TA providers, system participants, and ECE providers who are not currently participating in the system (i.e. Quality First nonparticipants). These groups represent decision-makers, implementers, and users of the system, and all were either interviewed, surveyed, or both.

Interviews and surveys

To determine the perceptions Quality First stakeholders and participants have in understanding the system's processes and outcomes, and whether adjustments to the Quality First model are needed to improve implementation, interviews and surveys were administered. Interviews were conducted with key stakeholders within Quality First and included the following constructs: perceptions of the main goal of Quality First; perceptions of the most critical factors for Quality First's success; successes and challenges of how Quality First is implemented; how the Quality First components operate and impact the overall quality rating and improvement process; the benefits and challenges of each Quality First component; the level of effectiveness of each Quality First component in contributing to participants' quality improvement; and perceptions of what improvements could be made to the Quality First model or any of its processes.

²⁶ See Appendix B for all data collection instruments and interview questions.

Five surveys were developed for the evaluation. These surveys were sent to TA providers and supervisors, Quality First participants, and ECE providers who do not currently participate in Quality First. The surveys included:

- 1. The Quality First implementation survey
- 2. The Quality First director survey
- 3. The Quality First teacher survey
- 4. The Quality First nonparticipant survey
- 5. A coaching follow-up questionnaire

The implementation, director, and teacher surveys were developed to provide further insight into Quality First participants' and TA providers' perceptions of the benefits and challenges of each Quality First component, the effectiveness of each component in helping to improve program quality, what improvements to the system are needed, and experiences with facilitators of and barriers to success in Quality First. As a follow-up to the implementation survey, an additional questionnaire was developed and administered to coaches and coaching supervisors. The purpose of this questionnaire was to gather supplemental information on how coaches use and record their intensity hours, as well as the benefits and challenges to tracking hours and working with participants. Finally, to gain insights into why ECE programs chose not to participate in Quality First and what might motivate them to apply for participation, a provider survey for programs that are not currently participating in Quality First was developed and administered to ECE programs across Arizona. The Quality First nonparticipant survey included the following constructs: perceptions of why providers do not currently participate in Quality First; barriers to participation; and perceptions of incentives or other motivations that would drive their participation (see Table 1 for a complete list of study participants and data collection methods).

All data collection participants were recruited with the support of First Things First and all activities were voluntary. Financial incentives for participation were offered to ECE providers, but not to other stakeholders (i.e., First Things First staff, coaches, assessors, CCHCs, or regional council directors). Final evaluation plans and data collection protocols and procedures were completed in collaboration with First Things First. Each of the data collection tools are described in more detail in the following sections.

Table 1. Evaluation participants and data collection methods							
Evaluation Participant Type	Interview Survey		Data Collection Tool				
Quality First stakeholders							
 Quality First program leadership 	X		Quality First stakeholder interviews				
First Things First regional council directors	Χ						
Quality First TA supervisors	Х	х	Quality First stakeholder interviews & implementation survey ²⁷				
Quality First TA providers: coaches, assessors, and CCHCs		Х	Quality First implementation survey				
Quality First participants: directors/owners and lead teachers		х	Quality First director & teacher surveys				
Quality First nonparticipants: AZ ECE providers not participating in Quality First		Х	Quality First nonparticipant survey				

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²⁷ Sent to coaching supervisors only.

Data analysis

All primary data collected for the evaluation were analyzed to determine alignment between Quality First's goals, implementation activities and processes, participants' experiences, and intended outcomes. Qualitative survey data were coded for themes and quantitative survey data were analyzed using descriptive statistics. Interview data were also coded for themes; however, these themes were initially drawn from the evaluation's research questions, and then expanded based on participant feedback as it pertained to answering the evaluation's research questions. These codes illuminated patterns in the responses, which were then summarized across and by interview participant type.

For reported frequencies including open-ended response coding, the following terms were used to provide information about the frequency of responses:

Table 2. Definition o	Table 2. Definition of frequency coding terms				
Term	Percent of responses				
Few	Less than 25%				
One quarter	About 25%				
Some	More than 25% to 50%				
One third	About 33%				
Less than half	More than 33% but less than 50%				
Half	About 50%				
Many	More than 50% to 75%				
Two thirds	About 66%				
Three quarters	About 75%				
Most	More than 75%				

Respondent Characteristics

Quality First stakeholders

A total of 20 interviews were conducted with Quality First stakeholders. Four interviewees were First Things First leadership staff working on Quality First, including the Quality first program director, an assessment coordinator, the early learning senior director, and a coaching coordinator. Eight interviewees were regional council directors (out of 28 total directors) representing urban, rural, and tribal First Things First regions, and eight interviewees were TA supervisors (out of 18 total supervisors), which included coaching (4), assessor (2), and CCHC (2) supervisors.

Quality First TA providers and supervisors

The Quality First implementation survey was sent to 161 active email addresses for TA providers, which included coaches, coaching supervisors, assessors, lead assessors, assessor supervisors, CCHCs, and CCHC supervisors. We received responses from 134, for a response rate of 83%. The coaching follow-up questionnaire was sent to all 83 Quality First coaches and coaching supervisors. We received responses from 50 coaches and supervisors for a response rate of 60%.

Just over half (57%) of the implementation survey respondents were coaches or coaching supervisors, one quarter (25%) were assessors or assessor supervisors, and 13% were CCHCs or CCHC supervisors.

²⁸ The survey was sent in December 2016 to all coaches who were currently working with Quality First participants.

These percentages are similar to the makeup of the total population of Quality First TA providers, as the coaching, assessor, and CCHC providers account for 56%, 28%, and 16% of the total TA staff, respectively. Nearly all implementation survey respondents had at least a bachelor's degree and no respondents had below a two-year college degree (see Table 3).

Table 3. Highest level of education for TA providers and supervisors									
Education levels	Assessor	Assessor	ССНС	ССНС	CCHC Coach Coaching		Other		
		Supervisor		Supervisor		Supervisor			
	(n = 27)	(n = 7)	(n = 17)	(n = 1)	(n = 65)	(n = 10)	(n = 6)		
Two-year college degree	0%	0%	17%	0%	0%	0%	0%		
Two-year college degree in	0%	0%	0%	0%	1%	0%	0%		
ECE or related field									
Bachelor's degree	30%	29%	64%	0%	9%	10%	0%		
Bachelor's degree in ECE or	48%	71%	11%	0%	48%	40%	17%		
a related field									
Graduate degree	0%	0%	0%	100%	8%	10%	17%		
Graduate degree in ECE or a related field	22%	0%	8%	0%	34%	40%	66%		

Data Source: Implementation survey

Implementation survey respondents reported working with Quality First participants in a variety of different geographic locations across Arizona. Most respondents (assessors and CCHCs) worked with Quality First participants throughout the state across different types of regions (urban, rural, and tribal). Coaches were more likely to work with participants within one type of geographic region. Fifty-three percent of coaches reported working within only one type of region, while 41% responded that they worked in both urban and rural settings. ²⁹

Over half of the coaches, assessors, and CCHC TA providers who responded to the implementation survey reported working in the ECE field for more than 10 years. When asked how long respondents have worked for Quality First specifically, assessor supervisors and CCHCs reported working the longest with Quality First, with over half reporting their length of time with Quality First as more than 6 years (see Table 4).

Table 4. TA providers' length of time with Quality First and in the ECE field									
Length of time	Assessor	Assessor Supervisor	ССНС	CCHC Supervisor	Coach	Coaching Supervisor	Other		
Length of time with Quality First	(n = 27)	(n = 7)	(n = 17)	(n = 1)	(n = 66)	(n = 10)	(n = 6)		
Less than 1 year	0%	0%	0%	0%	8%	0%	33%		
1-3 years	67%	14%	18%	100%	50%	40%	17%		
4-6 years	22%	29%	29%	0%	33%	50%	0%		
More than 6 years	11%	57%	53%	0%	9%	10%	50%		
Years working in ECE or a related field	(n = 27)	(n = 7)	(n = 17)	(n = 1)	(n = 66)	(n = 10)	(n = 6)		
Less than 3	0%	0%	17%	0%	0%	0%	0%		
3-7 years	19%	0%	24%	100%	11%	0%	0%		
7-10 years	26%	0%	6%	0%	15%	10%	50%		

²⁹ See Appendix D for additional detail regarding the regions served by Quality First TA providers.

Table 4. TA providers' length of time with Quality First and in the ECE field								
Length of time	ngth of time Assessor Supervisor CCHC Supervisor CCHC Supervisor				Coach	Coaching Supervisor	Other	
10-15 years	11%	14%	24%	0%	27%	10%	0%	
More than 15 years	44%	86%	29%	0%	47%	80%	50%	

Data Source: Implementation survey

Quality First participants and nonparticipants

The Quality First director survey was distributed to all 931 ECE programs participating in Quality First,³⁰ targeting directors and owners. We received responses from 430 programs, for a response rate of 46%, which is an above average response rate for a widely distributed online survey.³¹ The Quality First teacher survey was also distributed to all 931 ECE programs participating in Quality First³² and was targeted to lead teachers. We received responses from 712 teachers representing 389 programs, for a response rate of 42% among all Quality First participants. For more data about the director and teacher survey respondents, please see Appendix A.

The Quality First nonparticipant survey was distributed to 1,286 active email addresses for child care centers, family child care homes, and group homes across the state of Arizona. We received responses from 192 providers, for a response rate of 15%, which, while lower than the participant survey response rate, still falls within one standard of deviation of the typical response rate expected for online surveys distributed widely³³ and is similar to response rates found in other QRIS studies. Respondents were primarily directors/assistant directors, while just under one third (28%) were owners (see Table 5).

Table 5. Nonparticipant survey respondent types (n = 152)					
Respondent Type	Frequencies				
Director/Assistant Director	61%				
Owner	28%				
Other	11%				

Data Source: Quality First nonparticipant survey

For Quality First participants, most director and teacher survey respondents have worked for many years in the ECE field, with most participants (81%) having worked in the field for over 10 years. ³⁴ Around 70% of nonparticipants reported having more than 10 years of professional experience in the ECE field (see Table 6).

Table 6. Length of time working in the early care and education field by respondent type								
Time in ECE field	Quality First Directors							
	(n = 428)	(n = 712)	(n = 150)					
Less than 1 year	0%	4%	1%					
1-2 years	1%	4%	2%					

³⁰ The survey was sent in October 2016.

³¹ Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. Human Relations, 61(8), 1139-1160.

³² The survey was sent in February 2017 to all teachers who were currently working in Quality First programs.

³³ Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. Human Relations, 61(8), 1139-1160.

³⁴ For additional detail on Quality First participant characteristics and demographics, please see Appendix A.

Table 6. Length of time working in the early care and education field by respondent type								
Time in ECE field	Quality First Directors	Quality First Nonparticipants						
	(n = 428)	(n = 712)	(n = 150)					
2-5 years	4%	13%	5%					
5-8 years	6%	14%	8%					
8-10 years	7%	12%	11%					
Over 10 years	20%	17%	17%					
Over 15 years	20%	14%	15%					
Over 20 years	41%	22%	41%					

Data Source: Quality First director, teacher, and nonparticipant surveys

Experience in the ECE field by program star level did not vary much for either Quality First directors or teachers, although almost all 5-star program directors (90%) reported working in the field for over 10 years compared to 76% of 2-star program directors. Similarly, teachers in higher star level programs reported on average working in the field for more years, though teachers were less likely than directors to have worked in the field for more than 10 years (54% compared to 81%). See Tables 7 and 8 for additional detail.

Table 7. Number of years directors have worked in the ECE field by star level								
Length of Time in ECE	2 star	3 star	4 star	5 star	Total			
	(n=125)	(n=177)	(n=96)	(n=29)	(n=427)			
Less than 1 year	1%	0%	0%	0%	<1%			
1-2 years	1%	1%	0%	0%	1%			
2-5 years	6%	5%	3%	0%	4%			
5-8 years	6%	6%	5%	10%	6%			
8-10 years	10%	6%	7%	0%	7%			
Over 10 years	23%	18%	19%	21%	20%			
Over 15 years	21%	20%	17%	24%	20%			
Over 20 years	32%	44%	49%	45%	41%			

Data Source: Quality First director survey and First Things First administrative data

Table 8. Number of years teachers have worked in the ECE field by star level								
Length of Time in ECE	1 star	2 star	3 star	4 star	5 star	Total		
	(n=4)	(n=206)	(n=289)	(n=165)	(n=48)	(n=712)		
Less than 1 year	0%	5%	2%	4%	0%	4%		
1-2 years	25%	6%	3%	2%	4%	4%		
2-5 years	25%	15%	13%	10%	6%	13%		
5-8 years	0%	16%	14%	13%	15%	14%		
8-10 years	25%	12%	11%	12%	15%	12%		
Over 10 years	0%	17%	19%	14%	23%	17%		
Over 15 years	25%	10%	15%	19%	10%	14%		
Over 20 years	0%	19%	22%	25%	27%	22%		

Data Source: Quality First teacher survey and First Things First administrative data

When looking at the program characteristics of the Quality First participants that responded to both surveys, over 80% worked in centers child care centers. Just over half of director respondents were in urban parts of the state, while about three-quarters (76%) of teacher respondents were in urban areas. Just over 70% of nonparticipants were child care centers; 30% of which were independently owned, 20% were school-based, 21% were church-sponsored programs, and 18% were Head Start programs. One quarter of respondents were family child care providers (see Table 9 for more information, including how these characteristics compared to nonparticipants).

Table 9. Comparison of Quality First participant and Quality First nonparticipant survey respondent program information							
Program Information	Quality First Directors	Quality First Teachers	Quality First Nonparticipants				
Program Type	(n = 430)	(n=687)	(n = 178)				
Center	83%	96%	72%				
Family Child Care	17%	4%	25%				
I don't know			3%				
Program Affiliation ³⁵	(n = 422)	(n=685)	(n = 129)				
Church/faith-based	15%	13%	21%				
School-based	9%	8%	20%				
Head Start ³⁶	3%	2%	18%				
Franchise/chain			4%				
Independently owned			30%				
Other	8%	10%	7%				
Program Location ³⁷	(n = 428)	(n=660)	(n=153)				
Urban (city in area surrounding city with population greater than 100,000)	57%	76%	18%				
Rural (not in town or city)	28%	14%	5%				
Suburban (in area surrounding city with population greater than 100,000)			27%				
Tribal Status	(n=430)	(n=712)					
Tribal	3%	3%					
Not tribal	97%	97%					

Data Source: Quality First director, teacher, and nonparticipant surveys, First Things First administrative data -- indicates that the response was not an option for the survey question

For Quality First participants, the distribution of star ratings for teacher respondents was nearly identical to the distribution of star ratings from the director respondents. Almost three quarters (71%) of both the director and teacher survey respondents represented 2- and 3-star Quality First programs, which is

 $^{^{35}}$ There is not a complete comparison of program type information because this question was not asked in the Quality First participant survey. These data were pulled for participants from First Things First's administrative data and matched to the program type options in the non-participant survey, which are represented in the table. 36 n = 428

³⁷ Population totals were only defined in the non-participant survey. "Rural" and "urban" designations for Quality First participants were pulled from First Things First's administrative data and matched to survey respondents.

similar to the overall population of programs participating in Quality First (see Figure 3 and Table 10 for additional detail).

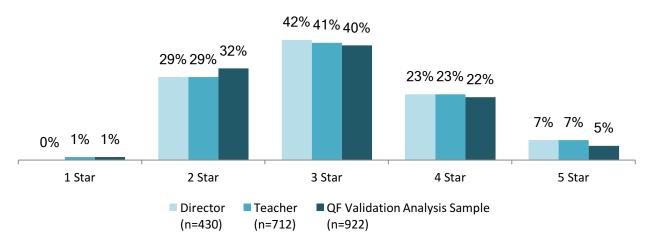


Figure 3. Star ratings of survey respondents and programs participating in Quality First

Data Source: Quality First director and teacher surveys, First Things First administrative data

When examining survey respondents' demographic characteristics, 68% of Quality First directors identified as white or Caucasian, while 43% identified as Hispanic or Latino¹⁴ (see Table 10 for additional detail). This breakdown was similar for Quality First teachers and nonparticipants; 57% and 60% identified as white or Caucasian, respectively, and 29% identified as Hispanic or Latino. Educational attainment level differed by respondent type, with teachers more likely to report having a high school diploma or GED compared to directors and nonparticipants, while directors were more likely to have a graduate degree.

Table 10. Comparison of Quality First participant and nonparticipant survey respondent demographics						
Demographics	Quality First Directors	Quality First Teachers	Quality First Nonparticipants			
Respondent type	(n = 429)	(n=712)	(n = 152)			
Director/assistant director	65%		61%			
Owner	25%		28%			
Corporate regional manager	1%					
Teacher	5%					
Lead teacher		73%				
Co-lead teacher	-	10%				
Assistant teacher	-	0%				
Other	4%		11%			
Race/ethnicity ³⁸	(n = 368)	(n=709)	(n = 150)			
Asian or Pacific Islander	10%	4%	2%			
Black/African- American	18%	10%	6%			

 $^{^{\}rm 38}$ In all surveys, this question was "select all that apply."

Demographics	Quality First Directors	Quality First Teachers	Quality First Nonparticipants
White or Caucasian	68%	57%	60%
Hispanic or Latino	43%	29%	29%
American Indian or Alaska Native	13%	5%	3%
Two or more races	13%		5%
Other	2%	2%	3%
Language spoken at home	(n = 369)	(n=708)	(n = 151)
English	94%	93%	94%
Spanish	21%	16%	4%
American Indian language	2%	1%	0%
Other	4%	2%	1%
English and another language EQUALLY	2%	3%	0%
Multiple other languages EQUALLY	0%	0%	1%
Highest education attained	(n = 372)	(n=704)	(n = 149)
Some high school, but no diploma			1%
High school diploma or GED	2%	16%	9%
Some college, but no degree	29%	37%	21%
Two-year college degree/Associate's degree	5%	7%	10%
Two-year college degree in early childhood or related field	13%	11%	6%
Bachelor's degree	9%	9%	13%
Bachelor's degree in early childhood or related field	15%	11%	15%
Master's degree	11%	4%	5%
Master's degree in early childhood or related field	16%	5%	15%
PhD or JD			1%
Other			4%

Data Source: Quality First director, teacher, and nonparticipant surveys

System Design Evaluation Key Findings

First Things First designed the Quality First model as a system of services that work together to improve participating programs' quality, with the ultimate goal of improving outcomes for children in Arizona. Services are delivered through Quality First's five quality components (see Figure 2): coaching, assessment, financial incentives, specialized assistance, and professional development. All five quality components are intended to contribute equally to the quality improvement process and should be implemented similarly in all areas of the state. Participants are expected to play an active role in the quality improvement process by engaging in learning and the application of best practices in their programs.

Understanding how the Quality First system design is working for participants, as well as for Quality First stakeholders and TA providers (coaches, assessors, and CCHCs), is critical to Quality First's success in

⁻⁻ indicates that the response was not an option for the survey question

achieving its goals. The following discussion summarizes findings from all qualitative data collection with Quality First leadership staff, regional council directors, coaching, assessor, and CCHC supervisors, in addition to surveys conducted with Quality First participants (directors/owners and lead teachers), coaches, assessors, CCHCs, and Quality First nonparticipants.

Perceptions of Quality First and motivation for being part of the system

To understand Quality First stakeholders' perceptions of the system's design and intended outcomes, Quality First leadership staff, TA supervisors, and regional council directors were interviewed about their perceptions of the main goal of Quality First and the most critical factors for its success. They were also asked about their understanding of how the Quality First components operate and impact the quality improvement and rating processes. In addition, Quality First participants and TA providers were surveyed about their perceptions of Quality First's activities and intended outcomes. Finally, ECE providers who are not currently participating in Quality First were surveyed about why they are not participating in the system and what would motivate them to consider applying.

First Things First has developed a Quality First logic model³⁹ to help depict and guide how the five main components of Quality First work together to create the desired outcomes. These outcomes include one long-term outcome that children demonstrate school readiness in all of the major developmental domains, as well as short-term outcomes of providing participants with support (e.g., providing different types of supports such as incentives, coaching, and training to support program quality improvement) and intermediate-term outcomes of improving quality (e.g., increasing program quality, increase participants' education and knowledge of ECE).

Purpose of Quality First

One of the intermediate goals identified in the Quality First logic model is to increase ECE program quality. Additionally, the model has a long-term outcome of children being ready for school at kindergarten entry. Findings indicate that respondents' perceptions of Quality First are aligned with the program's intended outcomes.

Most Quality First stakeholders identify the main goal of the system as improving the quality of ECE in Arizona.

Quality First stakeholders and TA providers were asked what they perceive to be the overall goal of the system. Of the 20 Quality First stakeholders (i.e., leadership staff, regional council directors, TA supervisors) who were interviewed, most (85%) reported that the main goal of Quality First is to improve the quality of child care in Arizona, and about one third also reported that another goal is to "prepare children for school/kindergarten" (35%) or "improve access to quality care" (30%). TA providers echoed some of this feedback in the implementation survey, with just over three quarters (77%) of those respondents reporting that the main goal of Quality First is to "improve the overall quality of the ECE field in Arizona."

When looking at the purpose of the system by respondent type, Quality First leadership staff and TA supervisors emphasize the quality improvement outcomes of the system, while Quality First

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³⁹ Saa Annandiy C

participants and regional council directors give weight to increasing access to quality care options in Arizona.

While TA supervisors and Quality First leadership staff almost unanimously agreed that the goal of Quality First is "to improve the quality of child care in Arizona," the regional council directors were more split in their perceptions of the main goal of the system. Over half of regional council directors interviewed (6/8) reported improving quality of care as well, but five also reported improving access to quality care as a main goal of Quality First. In contrast, none of the TA supervisors and only one leadership staff member reported improving access as a goal of Quality First.

Motivation for joining Quality First

Quality First participants

Quality First directors reported access to quality care as being among the top two reasons their program decided to apply for participation in the system. Nearly two-thirds (62%) of directors selected "to increase quality ECE options for children in Arizona" and 40% selected "to access Quality First scholarships for children and families." Fewer than 20% of directors reported that cash incentives for program improvement and its importance for their professional development were among their top two reasons for participating in the system (see Table 11 for additional details).

Table 11. Top two reasons Quality First directors decided to apply for participation in the system					
Reasons programs decided to apply for participation in Quality First	n = 428	Frequency			
To increase quality ECE options for children in Arizona	264	62%			
To access Quality First scholarships for children and families	173	40%			
To be part of a state-wide early childhood quality initiative/program	154	36%			
To access supports from a Quality First coach or program implementation specialist (e.g. mental health consultant, inclusion coach, etc.)	121	28%			
It is important for my professional development/professionalism	94	22%			
To access cash incentives for program improvement	78	18%			
To better attract families to my program	31	7%			
To access licensing fee support	20	5%			
Someone else in my organization or governing body required my program to participate	15	4%			
Other	7	2%			

Data Source: Quality First director survey

Directors' responses by star-level did not vary significantly. More than half of 2- through 5-star programs reported that increasing quality care and education options was one of their top two motivations for deciding to participate in Quality First. Star levels 2 through 5 also reported accessing scholarships for children and families as their second reason for participating in Quality First (see Table 12 for additional details).

Table 12. Top two reasons programs decided to apply level	for partic	cipation in	Quality Firs	t by curre	nt star		
Reasons programs decided to apply for participation in Quality First 2 Star 2 Star 3 Star 4 Star 5 Star							
	(n = 0)	(n = 125)	(n = 178)	(n = 96)	(n = 29)		
To increase quality ECE options for children in Arizona	0%	60%	65%	60%	52%		

Table 12. Top two reasons programs decided to apply for participation in Quality First by current star level Reasons programs decided to apply for participation in 1 Star 2 Star 3 Star 4 Star 5 Star **Quality First** (n = 0)(n = 125)(n = 178)(n = 96)(n = 29)To access Quality First scholarships for children & families 0% 35% 40% 45% 48% To be part of a state-wide early childhood quality 0% 34% 35% 39% 41% initiative/program To access supports from a Quality First coach or program 0% 36% 25% 24% 31% implementation specialist It is important for my professional development/ 14% 0% 28% 24% 13% professionalism To access cash incentives for program improvement 19% 15% 24% 14% 0% To better attract families to my program 0% 11% 7% 4% 0% To access licensing fee support 0% 7% 3% 5% 0% Someone else required my program to participate 0% 6% 2% 3% 0% Other 1% 1% 3% 0% 3%

Data Source: Quality First director survey and First Things First administrative data

When looking at motivation for participating in Quality First by location, more than half of all directors (60% of urban programs and 59% of rural programs), including almost all tribal programs (88%) selected increasing quality ECE options. Rural directors also appeared to be more motivated by the Quality First scholarships than urban directors (56% versus 37%) and urban directors were more motivated by being part of a state-wide initiative (43% versus 25%). This could reflect rural programs using the scholarships to promote access and increase enrollment, a challenge they may face more often than urban programs (see Table 13 for more information).

Table 13. Top two reasons for applying to participate in Quality First by region type						
Reasons for applying to participate in Quality First	Urban	Rural	Tribal			
	(n=243)	(n=118)	(n=8)			
To increase quality ECE options for children in Arizona	60%	59%	88%			
To access Quality First scholarships for children and families	37%	56%	38%			
To be part of a state-wide early childhood quality initiative/program	43%	25%	0%			
To access supports from a Quality First coach or program implementation specialist (e.g. mental health consultant, inclusion coach, etc.)	33%	18%	38%			
It is important for my professional development/professionalism	20%	22%	0%			
To access cash incentives for program improvement	18%	16%	38%			
To better attract families to my program	8%	5%	0%			

Data Source: Quality First director survey

Finally, differences in motivation for participating in Quality First by program type were evident. Increasing quality ECE options was a top motivation for both center-based and family child care directors/owners, and center-based and family child care directors/owners were equally likely to be motivated by accessing scholarships. However, family child care providers were more motivated than centers by the system's importance to their professional development (49% compared to 17%) and

center-based providers were more motivated by being part of a state-wide ECE initiative than family child care (39% compared to 20%; see Table 14).

Table 14. Top two reasons for applying to participate in Quality First by program type						
Reasons for applying to participate in Quality First	Center	Family Child Care				
	(n = 357)	(n = 71)				
To increase quality ECE options for children in Arizona	62%	58%				
To access Quality First scholarships for children and families	41%	37%				
It is important for my professional development/professionalism	17%	49%				
To be part of a state-wide early childhood quality initiative/program	39%	20%				
To access supports from a Quality First coach or program implementation specialist (e.g. mental health consultant, inclusion coach, etc.)	29%	27%				
To access cash incentives for program improvement	19%	13%				
To better attract families to my program	7%	8%				

Data Source: Quality First director survey

Quality First nonparticipants

Most nonparticipants (78%) also agreed that the primary purpose of Quality First is to help ECE programs improve their quality. Just over 60% also agreed or strongly agreed that the primary purpose of Quality First is to rate the quality of programs. In addition, nonparticipants were asked about their perceptions of the system and what their motivations might be for participating in Quality First in the future (see Tables 15 and 16).

Unlike Quality First directors, nonparticipants had less consensus about why they might decide to participate in Quality First; however, their top two responses were to be a part of a statewide early childhood quality initiative (38%) and to access scholarships (36%).⁴⁰

Table 15. Top two factors that would most affect nonparticipants' decision to participants decision to participants.	ırticipate ir	n Quality
Reasons that would most affect providers' decision to participate in Quality First	n = 177	Frequency
To be part of a state-wide early childhood quality initiative/program	68	38%
To access Quality First scholarships for children and families	63	36%
It is important for my professional development/professionalism	56	32%
To access supports from a Quality First coach or program implementation specialist (e.g. mental health consultant, inclusion coach, etc.)	51	29%
To better attract families to my program	44	24%
To access cash incentives for program improvement	42	24%
To access licensing fee support	32	18%
To meet a requirement from someone else in my organization or governing body to participate	13	7%
Other, please describe	11	6%

Data source: Quality First nonparticipant survey

⁴⁰ ECE providers not currently participating in Quality First were not asked about increasing quality care options for children in Arizona.

While overall nonparticipants' reasons for potentially applying for Quality First were somewhat evenly spread-out, their motivations varied by program type (see Table 16). Child care center nonparticipants emphasized accessing scholarships and TA supports, while family child care nonparticipants were more focused on professional development.

Table 16. Top Two factors that would most affect nonparticipants' decision to participants by program type	articipate in	Quality
Reasons that would most affect the decision to apply for participation in Quality First	Center	Family Child Care
	(n=129)	(n=44)
To access Quality First scholarships for children and families	36%	20%
To be part of a state-wide early childhood quality initiative/program	37%	34%
It is important for my professional development/professionalism	27%	34%
To access supports from a Quality First coach or program implementation specialist (e.g. mental health consultant, inclusion coach, etc.)	32%	16%
To better attract families to my program	24%	25%
To access cash incentives for program improvement	19%	20%
To access licensing fee support	16%	20%

Data Source: Quality First nonparticipant survey

Understanding programs' motivation for being in Quality First is important for assessing how their motivations may reflect their individual goals for participation in the system. Both Quality First participants and nonparticipants across the state put some emphasis on increasing quality ECE options and providing access through scholarships, though it is unclear if they are connecting this increase in quality options to their own individual program improvement.

Critical factors for the success of Quality First

Each Quality First component is intended to help participants increase their skills and knowledge around ECE best practices, which is then intended to contribute to improving overall program quality. To examine this further, it is important to understand how Quality First stakeholders believe the system's goals should be achieved, in addition to their beliefs about the most effective ways to improve program quality. To address these considerations, respondents were asked what they perceive to be the most critical factors in determining whether Quality First is successful in reaching its goals and how effective each of the five components are at improving program quality.

Quality First Stakeholders and TA Providers

There was little agreement among Quality First stakeholders and TA providers regarding the most critical factor in determining whether the system is successful in reaching its goals. In general, system stakeholders emphasized participant engagement while TA providers focused on funding as the most critical factor for Quality First's success.

More than half of the Quality First stakeholders interviewed (13/20) reported that the most critical factor that will determine whether the Quality First system is successful in reaching its goals is provider buy-in and engagement in the quality improvement process, while fewer than half (7/20) reported that additional support (training/PD or TA support) for participants was the most critical factor. In addition, during the stakeholder interviews Quality First leadership staff and regional council directors were asked about the most critical factors that will determine whether a *participant* is successful in Quality First,

and again more than half (9/12) reported that participant buy-in and engagement was most important. For TA providers, 60% reported that the most critical factor for Quality First to be successful is sustainable funding.⁴¹

Quality First stakeholders and TA providers identified coaching and targeted TA as the most effective supports for improving program quality, while Quality First participants specified financial incentives as the most effective support for improving program quality, as well as the most beneficial aspect of participating in Quality First.

There was consensus (more than 80%) from both Quality First stakeholders and TA providers that the individualized support and goal development provided by a coach, as well as targeted training and TA were most effective for improving program quality. TA providers reported even stronger support for the guidance provided by a coach, with more than 90% reporting that this was "effective" or "very effective" in helping to improve program quality. DHS licensing fee support was rated as the least effective component in helping participants improve program quality by both groups (see Table 17 for additional details).

Table 17. Effectiveness of select Quality First supports to help participants improve program quality							
Select Quality First Supports	Ineffective	Somewhat effective	Neutral	Effective	Very effective		
Individualized guidance and support by a Quality First Coach (n = 17)	0%	0%	12%	65%	23%		
Goal development with coach (n = 16)	0%	0%	31%	63%	19%		
Targeted training and TA (n = 16)	0%	0%	19%	50%	31%		
Specialized assistance (n = 16)	6%	0%	25%	56%	13%		
Monthly on-site coaching visits (n=16)	0%	6%	31%	50%	13%		
Professional development access and support (i.e. continuing education support) (n = 17)	0%	6%	18%	35%	24%		
Financial incentive payments based on star-level (n = 16)	0%	25%	25%	38%	12%		
Quality First scholarships (n = 17)	6%	29%	24%	41%	0%		
DHS licensing fee support (n = 16)	6%	31%	31%	25%	6%		

Data Source: Key informant interviews with Quality First stakeholders; Quality First leadership staff, regional council directors, and TA supervisors

Quality First participants

From the perspective of Quality First directors and teachers, the most helpful supports for improving program quality included *incentives for purchasing classroom materials or equipment, scholarships, and coaching*. In their survey, more than 80% of directors reported that incentives for purchasing materials were "very helpful" for improving quality, followed by scholarships (73% "very helpful"), and coaching (64% "very helpful"). While teachers reported the same three supports as being most helpful, they were less positive than directors. In their survey, only 32% of teachers reported that incentives for purchasing materials and scholarships were "very helpful", and 23% reported that coaching was "very helpful" for improving quality.

⁴¹ The responses "provider buy-in" or "provider engagement with the quality improvement process" were not options in the implementation survey.

The support used least often by participants was ECE inclusion (ECEI+),⁴² which was used by about one-third or fewer of all director and teacher respondents (see Tables 18 and 19 for additional detail).

Table 18. Quality First director perceptions of the most helpful supports for improving program quality						
Quality First Support	Not Used	Not Very Helpful	Somewhat Helpful	Neutral	Helpful	Very Helpful
Quality First incentives for purchasing classroom materials or equipment (n = 388)	2%	0%	2%	1%	13%	82%
Quality First Child Scholarships (n = 388)	15%	1%	1%	2%	8%	73%
Quality First Coaching (n = 392)	1%	3%	7%	3%	23%	64%
The Feedback Report from the CLASS Observation (n = 385)	9%	3%	4%	7%	27%	50%
The Feedback Report from the ECERS-R Observation (n = 388)	9%	3%	5%	7%	26%	49%
The Feedback Report from the Quality First Points Scale Assessment (n=382)	13%	4%	4%	9%	25%	45%
Licensing Fee Assistance (n = 379)	37%	1%	3%	8%	11%	40%
Arizona Early Childhood Career and Professional Network (n = 385)	19%	12%	8%	15%	23%	24%
The Quality First Website (n = 390)	9%	8%	14%	18%	29%	22%
Early Childhood Mental Health Consult. System (Smart Support) * (n = 380)	40%	3%	5%	10%	14%	27%
ECE Inclusion (ECEI+) * (n = 373)	62%	2%	3%	10%	7%	16%

Data Source: Quality First Director survey

^{*} Denotes a support that is not available in every First Things First region

Table 19. Quality First teacher perceptions of the most helpful supports for improving program quality						
Quality First Support	Not Used	Not Very Helpful	Somewhat Helpful	Neutral	Helpful	Very Helpful
Quality First incentives for purchasing classroom materials or equipment (n = 669)	11%	3%	11%	12%	30%	32%
Quality First Child Scholarships (n = 665)	20%	2%	7%	18%	20%	32%
Quality First Coaching (n = 675)	10%	4%	16%	14%	33%	23%
The Feedback Report from the CLASS Observation (n = 660)	14%	4%	11%	13%	34%	23%
The Feedback Report from the ECERS-R Observation (n = 662)	17%	3%	11%	14%	32%	22%
The Feedback Report from the Quality First Points Scale Assessment (n=658)	16%	4%	10%	16%	33%	21%
Early Childhood Mental Health Consult. System (Smart Support) * (n = 646)	35%	4%	7%	18%	23%	13%
ECE Inclusion (ECEI+) * (n = 652)	36%	2%	7%	20%	23%	12%
Other (n=502)	42%	0%	8%	21%	18%	11%

Data Source: Quality First teacher survey

^{*} Denotes a support that is not available in every First Things First region

 $^{^{42}}$ ECEI+ is a specialized assistance support provided by inclusion consultants/specialists.

More than 75% of directors reported that the most useful coaching supports (by rating these activities as "useful" or "very useful") were when coaches worked with staff to set goals for quality improvement and develop a Quality Improvement Plan (QIP), when they worked directly with teachers on a specific skill or implementing a new strategy, and when they reviewed an ERS or CLASS feedback report (see Table 20 for additional detail).

In addition, almost 90% of directors reported that the goals set in their QIP helped them increase their star rating (87%) and that their coach provided guidance on how to access the resources and supports outlined in the QIP (89%).

Table 20. Quality First director perceptions of the most useful activities worked on with their coach						
Coaching activities	Not Used	Not at all Useful	Somewhat Useful	Neutral	Useful	Very Useful
A coaching visit where your coach worked directly with teachers on a specific skill or implementing a new strategy (n = 395)	9%	1%	6%	5%	27%	52%
A coaching visit where your coach worked with you or your staff to set goals for quality improvement and developed a QIP (n = 382)	8%	2%	5%	5%	31%	49%
A coaching visit where your coach reviewed an ERS or CLASS feedback report (n = 393)	10%	1%	7%	6%	30%	47%
A practice CLASS observation to prepare for a ratings' visit or assessment (n = 397)	24%	1%	4%	4%	23%	45%
A coaching visit where your coach worked directly with the program director or owner on a specific skill or implementing a new strategy (n = 389)	13%	1%	6%	5%	31%	44%
A practice ERS observation to prepare for a ratings' visit or assessment (n = 393)	22%	2%	6%	3%	24%	43%
A coaching visit where your coach supported the development and implementation of a new policy for your program (n = 389)	24%	1%	5%	9%	27%	33%

Data Source: Quality First director survey

Most teachers (80%) reported that the time coaches spent in their classroom during regular onsite visits was enough to meet their needs. 43 Of those teachers who reported requesting that their coach come for an extra visit or spend extra time in their classroom (n = 366), 78% said that their coach could accommodate the request. About half (46%) of teachers reported requesting extra time from coaches when they had additional questions and concerns that could not be addressed during regular visits and just over one-third (35%) requested extra time when an observation or assessment was coming up.

Challenges to Quality First's success

Stakeholders and TA providers were asked about what they perceive to be the biggest challenges to helping participants learn and improve, and Quality First teachers and directors were asked about the main challenges they face as participants in Quality First. Additionally, to better understand what other

⁴³ When asked how much time coaches spend in their classrooms, 69% of teachers reported that it was an hour or less.

barriers to Quality First might exist for those not already part of the system, Quality First nonparticipants were asked about the reasons why they had decided not to apply for participation in the system.

Quality First stakeholders and TA providers

Communication and collaboration among TA providers is one of the main challenges of specialized assistance and coaching in helping participants learn and improve.

Stakeholders and TA providers reported that providing Quality First incentives and supports alone is not sufficient for helping programs achieve Quality First's goals. It is important for all TA providers to work collaboratively for program staff to improve their understanding of all standards and requirements for participation in the Quality First system, and ultimately, go on to improve program quality.

Collaboration and aligning goal setting across all TA providers was reported by TA supervisors as being helpful for ensuring that participants understand all aspects of program quality and improvement. In addition, this ensures participants are not overwhelmed by the amount of information and number of people coming into their classrooms. While half of the supervisors interviewed (4/8) reported that their coaches, assessors, and CCHCs collaborate well, half also reported that the need to improve collaboration is the main challenge of the specialized assistance component in helping participating program staff learn best practices.

Quality First participants

Clear communication around expectations for Quality First's requirements and standards is important for participants' success.

Directors reported (n = 307) several challenges that they experience during their participation in Quality First. When asked about the biggest challenge they face as a participant, 27% of directors reported issues with the assessments, including difficulty understanding the tools, feeling the process is overly negative or stressful for staff, and some perceptions of inequity in the process (e.g. not accounting for physical building issues that cannot be changed, poorly captures Montessori or other nontraditional classroom practices, one day "snapshot" is not an accurate picture of the program). Twenty-two percent reported issues with implementing new quality improvement practices, including getting teachers to adopt new practices. A few directors (around 11%) also reported challenges with having enough time to get all requirements completed and coaching.

In addition, directors (37%) and teachers (48%) reported spending time developing an understanding of the Quality First rating process and requirements was one of the top three primary things they have worked on with their coach.

Quality First nonparticipants

Most nonparticipants have heard of Quality First and half of those respondents are considering participation in the system; however, waiting lists or insufficient information about Quality First are preventing them from applying.

Among nonparticipants, more than 80% reported that they heard of Quality First before receiving the survey. Of the respondents who had heard of Quality First, when asked how they heard of it, the top three responses were: through another provider (50%), at an early childhood training (40%), or through a child care resource and referral center (CCR&R) (20%). Half of the nonparticipants reported that their program is considering participating in Quality First, while the other half was split between "not considering participation at all" and "I don't know."

Nonparticipants were also asked about the top two reasons that would most affect their decision *not* to participate in Quality First. Their top two responses were that they do not have sufficient information to decide and that their region currently has a waiting list for applying for Quality First participation (see Table 21). Waiting lists were reported as being especially common among center-based nonparticipants compared to family child care nonparticipants (34% and 9%, respectively) and in more geographically dense areas (36% in urban compared to 13% in small towns⁴⁴ and 0% in rural areas⁴⁵).

Table 21. Top two factors that would most affect ECE providers' decision not to p	articipate i	n Quality
Reasons that would most affect providers' decision NOT to participate in Quality First	n = 186	Frequency
I don't have sufficient information to decide	58	31%
My region has a waiting list for applying for Quality First participation	51	27%
I don't need it to attract families to my program (Families don't ask about it; I have a waiting list)	39	21%
The application/rating process is difficult	26	14%
I don't trust that a Quality First rating will accurately reflect my program's quality	20	11%
It is not worth the investment of my time compared to the outcomes you get from participating in Quality First	16	9%
I am waiting to hear from other programs/providers about their experiences first	13	7%
It is too expensive to participate	13	7%
There is not enough financial incentive to join	11	6%
I don't need to improve the quality of my program	11	6%
I do not want my environment to be observed	8	4%
Quality First does not provide enough support for programs/providers	2	1.1%
I don't believe ECE programs should be rated	2	1.1%

Data source: Quality First nonparticipant survey

Finally, nearly all nonparticipants agreed that parents should consider a program's quality when choosing child care (89% agreed or strongly agreed); however, these respondents were less likely to agree that Quality First ratings can be useful in helping parents choose a quality program (53% agreed or strongly agreed).

Summary

Quality First stakeholders designed and are implementing the QIRS for a specific purpose: to improve the quality of the ECE field in Arizona. Participants are joining the system to increase quality options for children and families in the state by being a Quality First provider and through accessing scholarships and other resources. Differences in respondents' perceptions of the purpose of Quality First and how the system will achieve its goals speak directly to differences in their understanding of the system's design overall. Assessing these differences (as well as similarities) in understanding is important for identifying areas for improvement in the Quality First system design and implementation. The next section will go into more detail about stakeholders' perceptions of the system's design and its intended outcomes by examining feedback on the strengths and challenges of each Quality First component.

⁴⁴ Defined as having a population of less than 20,000 people.

⁴⁵ Defined as an area that is not part of a town or city.

Improving Quality First's system implementation

To learn more about implementation and the potential need for adjustments to the Quality First model, Quality First leadership staff, TA supervisors, and regional council directors were interviewed about the benefits and challenges of each component. They also provided input and recommendations for potential changes that could be made to the Quality First model or any of its processes. In addition, Quality First stakeholders, TA providers, and Quality First participants provided their perceptions of the benefits and challenges of each component in helping to increase the skills and knowledge of program staff and improve program quality. They also provided their perspectives on each of the Quality First quality improvement components to understand how they are working at each level and for different roles in the system.

Application and selection process

First Things First regional council directors and Quality First leadership staff were asked about the Quality First application and selection process and their perceptions of its effectiveness. While long waiting lists were among the main challenges, respondents reported that this process could be improved by use of a readiness assessment and clear communication about expectations for participation in the system.

Programs are selected for participation in Quality First by going through an application process in 28 different First Things First regions across the state. ⁴⁶ Selection is completed by First Things First on a rolling basis and is dependent upon whether there are Quality First openings available in a region. If there are not openings available, then the program is put on a waiting list. A waiting list for each region is maintained. Half of the stakeholder respondents (6/12) reported that they feel the application and selection process is going well, and just over half (7/12) mentioned that waiting lists are just an expected part of this process. One third of these interviewees (4/12) reported difficulties with the process, ranging from funding issues to very long waiting lists (e.g., one regional council director reported that they have had programs on their waiting list since 2009, one leadership staff member reported waiting lists that range from 1 year or less to 7 years).

When asked what could be done differently, there was no clear consensus. One third (3/9) reported that First Things First should assess a program's readiness for participation in the system, better communicate expectations for participation, and address long waiting lists. These suggestions included potentially prescreening programs to ensure engagement and readiness for the quality improvement process and providing clear expectations for what it takes to be in Quality First, such as the time commitment and effort to learn and change practices. Two of the Quality First leadership staff suggested addressing the issue with waiting lists directly by targeting highest need programs or reducing the cost per slot, while one staff member also mentioned the need to better communicate expectations about participation in the system to applicants.

Strengths and challenges of Quality First's components

During their interviews, regional council directors and Quality First leadership were asked about the main benefits of each Quality First component in improving program quality as well as the main challenges of implementing each component. During their interviews, TA supervisors and Quality First leadership staff were asked about the main benefits of how each component helps participants increase

⁴⁶ See Appendix D for a list of all First Things First regions

skills or learn best practices. Finally, in the implementation survey, TA providers were asked about their experiences providing quality improvement support to participants.

Coaching

TA Providers: Coaches

In the implementation survey, coaches were asked about their experiences with the coaching process, including the required number of coaching hours. Coaches are required to provide a set amount of onsite "intensity" hours to participants based on their star rating. One- and 2-star programs receive 6 hours of onsite coaching per month and 3- through 5-star programs receive 4 hours of onsite coaching per month.

Coaches were asked how easy it is for them to meet the hours' requirements while providing the support programs need/request. More than 80% reported that it is "somewhat easy" or "not at all easy." Only one coach reported that it is "very easy." Scheduling challenges were reported as the most common reason meeting the hour requirements was difficult (58%), and about 20% also cited issues with traveling, program size, a heavy coach caseload, and program willingness as reasons this was difficult (see Table 22 for additional detail).

Table 22. Level of difficulty and challe	enges meeting intensity hours	
Issues meeting required onsite hours	Responses	Frequencies
Overall, how easy is it for you to meet	Not at all easy	32%
the onsite coaching hour requirements	Somewhat easy	50%
in order to provide the support programs need/ request? (n = 50)	Easy	16%
programs mose, requests (ii se,	Very Easy	2%
If Not at all easy or Somewhat	Scheduling challenges	58%
easy:	Traveling	27%
What is the main factor that makes this challenging? (n = 41)	Site size affects ability to meet hours	22%
tins thanenging: (II – 41)	Heavy coach caseload	19%
	Site willingness	19%
	Site staff availability	12%
	Preparation time	12%
	Requirement does not meet home provider's needs	7%
	Site needs vary month to month	10%

Data Source: Quality First coaching follow-up questionnaire

In the implementation survey, more than 90% of coaches reported that they deviate from the required number of coaching hours (see Table 23 for additional detail). There was not a reported trend in coaches either always going over or always going under the required hours, and instead deviations were most commonly based on a program's need. Of those that reported deviating from the required coaching intensity hours in the survey, the most common reasons were when:

- A teacher or director has additional questions or concerns that cannot be addressed within their required hours
- A particular classroom circumstance arises like a staffing change
- There are ongoing scheduling challenges

• A teacher or director requests extra time

Additionally, in the follow-up coaching questionnaire, 70% of coaches also reported deviating from the required hours when a program just had an assessment or has an assessment coming up.

Table 23. Coaching intensity hours and reasons for deviating from the required number			
Required onsite coaching hours	Responses	Frequencies	
Do you ever need to deviate	Yes	93%	
from the required number of visits or hours? (n=58)	No	7%	
If Yes:	If there are ongoing scheduling challenges	67%	
What are the most common reasons you may deviate from the required number	If a teacher or director has additional questions and concerns that cannot be addressed outside of the required 4 or 6 hours per month	65%	
of coaching visits or hours? (n=52)	If there are classroom circumstances, like a staffing change	63%	
(11-32)	If a teacher or director requests extra time	60%	
	Other, please describe	58%	

Data Source: Quality First implementation survey

For those that selected "other," about one quarter reported spending extra time at a program when a participant is about to go through their assessment process, and another quarter reported that they spend extra hours with a participant when they request a training.

In addition, when asked how well the Quality First Academy prepared coaches to do their job, about half (54%) reported "somewhat well" or "very well." When asked why the Quality First Academy did not prepare them to do their job, of the eleven coaches that responded, nearly all reported that this was because the information was either old or redundant, or that it is information they learn on the job.

TA supervisors and Quality First leadership staff

TA supervisors and Quality First leadership were asked about their perceptions of the main benefits and challenges of how coaching supports help program staff learn about ECE best practices.

- Just over half of the TA supervisors and Quality First leadership staff (7/12) interviewed reported that the main benefit of coaching is that it provides resources and training for teachers and other program staff.
- The key strength of this support is that it is individualized for the program, which helps to meet the needs of each participant at their level.
- While Quality First leadership staff believed that the provider-coach relationship was the most important aspect of coaching for improving program quality, they did not report this aspect as being important for increasing program staff's skills and knowledge; leadership staff reported the resources coaches provided as being most important here.
- There was no clear consensus about challenges, with answers split across time in general to get their work done, the time it takes to build a relationship with the program, and programs' willingness to change.

Regional council directors and Quality First leadership staff

Respondents were asked about their perceptions of the main benefits of Quality First coaching in helping participants improve their overall program quality and challenges to its implementation.

- Nearly all regional council directors and Quality First leadership staff (10/12) reported that the
 relationship between the provider and the coach is the most beneficial aspect of this
 component.
- Half of the regional council directors and Quality First leadership interviewed (6/12) reported that the coaching intensity hours' requirement was the main challenge of implementing the coaching model.
 - They indicated that the coaching model is currently designed to be "one size fits all" and that rarely works for participants and coaches; some programs need more time while others don't need all the hours they are allocated, and there is no room for flexibility when coaches are visiting programs since they must meet their hour requirements.

Assessment

TA Providers: Assessors

Like coaches, assessors reported some challenges regarding the Quality First Academy training. When asked how well the Academy prepared them to do their job, over half of assessors reported "neutral," "not well enough," or "not at all." When asked why the Quality First Academy did not prepare them to do their job, eight assessors responded and all of them reported that this was because the information was not relevant or useful to their job.

TA supervisors and Quality First leadership staff

Supervisors and leadership staff were asked what they believe to be the main benefits and challenges of how Quality First's assessments help program staff learn ECE best practices.

- One third of the TA supervisors and Quality First leadership staff interviewed reported that the
 main benefit of assessments is that they help participants understand what best practices and
 quality are.
- One third also reported that they help programs identify their strengths and/or areas in need of improvement.
- Almost all (7/9) reported that the main challenge is programs having difficulty interpreting or
 using assessment results (e.g. providers don't know how to use results to improve quality,
 coaches have difficulty interpreting because they do not conduct the assessment, assessments
 are only a snapshot on one day).

Regional council directors and Quality First leadership staff

Regional council directors and Quality First leadership staff were asked about their perceptions of the main benefits of Quality First assessments in helping participants improve their overall program quality and challenges to implementation.

- More than half of the regional council directors and Quality First leadership (8/12) interviewed
 reported that a main benefit of assessment is that it provides a clear snapshot of a program's
 quality and areas to improve. Just under half reported that a main benefit is that the tools are
 objective and consistent at providing information about program quality.
- Half (6/12) reported that the main challenge of implementation is working with negative participant opinions about the assessment, as many participants feel like this is a grade or test of their abilities.

• Three reported that the main challenge is specifically with the Quality First Points Scale (QFPS). Because it comes at the end of the assessment process, participants sometimes feel surprised by its content, or they didn't know what to expect with that tool. They also noted that it can be a struggle for some programs to understand certain components or content in the QFPS assessment.

Financial incentives

Regional council directors and Quality First leadership staff

Regional council directors and Quality First leadership were asked about their perceptions of the main benefits of Quality First's financial incentives (assistance with licensing fees, funds to purchase materials, scholarships to help low-income families access quality programs) in helping participants improve their overall program quality and challenges to implementation.

- Almost all regional council directors and Quality First leadership interviewed (10/12) reported
 that financial incentives removed barriers to purchasing materials and gaining access to training
 or other professional development.
- Three reported that the main challenge of implementing the incentive model was related to a participant's star level.
 - For 3- to 5-star programs, some regional council directors and leadership reported that
 these participants get to a point where they no longer know how to spend their cash
 incentive dollars or there are other barriers to accessing what they want to spend the
 money on (e.g., not enough time for staff to attend classes or trainings); however, the
 other half reported that the financial incentives are not enough.
 - In addition, three respondents reported that another challenge is the lack of flexibility in how financial incentive dollars can be spent for 1- and 2-star programs, as these programs are only able to purchase materials and other approved resources through their coach.

TA supervisors and Quality First leadership staff

Responses were divided when TA supervisors and leadership staff were asked about the main benefits and challenges of the financial incentives in helping program staff learn about ECE best practices.

- About half of the TA supervisors and Quality First leadership staff interviewed (6/11) reported
 that financial incentives help programs purchase materials to improve the classroom
 environment, which helps them meet best practices.
- The other half (5/11) reported that an additional benefit is that incentives can help staff access additional professional development that may not be available from the coach.

There was no clear consensus about challenges. Three respondents reported that it is not enough money or that programs need it for higher cost things like training, more expensive PD or education, or building improvements. One reported the lack of flexibility in how the money is received/spent, two reported that there is a need for more support around helping programs understand what types of purchases are contributing to best practices or improving quality, and two reported that higher level programs sometimes don't know how to spend their remaining money.

Specialized Assistance

Regional council directors and Quality First leadership staff

Respondents were interviewed about their perceptions of the main benefits of Quality First's specialized assistance in helping participants improve their overall program quality and challenges to implementation.

- Two thirds of the regional council directors and Quality First leadership interviewed (8/12) reported that they provide specialized knowledge and support for the program that the participant cannot receive from their coach, so this assistance allows programs to address specific areas of health and safety that they may otherwise be unable to improve.
- Half (5/10) reported that the biggest challenge to implementing this component is that specialized assistance is not available in every region.
 - Outside of support offered through CCHCs, not all Quality First participants have access to mental health and inclusion specialists. Some regions are able to fund these services, while others cannot or chose not to fund them.
- For CCHC services, which are available to all participants, the biggest challenge reported by regional council directors and Quality First leadership was participants not selecting the appropriate level of support or not knowing what they can get out of each level of support.

TA supervisors and Quality First leadership staff

TA supervisors and Quality First leaderships staff were asked about the main benefits and challenges of how Quality First's specialized assistance helps program staff learn about ECE best practices.

- More than half of the TA supervisors and Quality First leadership staff interviewed (7/12)
 reported that specialized assistance helps teachers get more specialized support to meet the
 needs of children in their programs, and develop more specialized skills and strategies with
 support from experts in those areas.
- Four reported that this support helps take some of the workload off coaches.
- More than half (6/11) reported the main challenge as access, because mental health and inclusion specialists are not available statewide, due to a lack of funding in some regions.
- Four reported the need for more collaboration across these specialists and with coaches.

Professional development

Regional council directors and Quality First leadership staff

Regional council directors and Quality First leadership were interviewed about what they thought were the main benefits and barriers to professional development activities in helping participants improve their overall program quality and challenges to implementation.

- Most of the regional council directors and Quality First leadership staff interviewed reported
 that this is largely provided through the coaches and Quality First Academy and the content is
 relevant and beneficial to participants.
- While most reported that the professional development provided by coaches to participants is beneficial, reliance on coaches for ongoing development is also a challenge to implementing the professional development component.

 About one third reported that coaches are already stretched for time and while their work helps program staff learn new skills and request training on a specific topic, it can be challenging for coaches to meet this need.

In addition, when teachers are trying to access other forms of professional development outside of the Quality First system, just over half of the regional council directors and Quality First leadership staff reported that time and availability for teachers to attend trainings or classes is a challenge.

- This finding was further reflected in the director survey, where a lack of time to attend a class or training was their top challenge (56%) in helping staff gain educational requirements. This was also a challenge for teachers. In their survey, 46% reported a lack of time as a barrier to gaining educational requirements.
- Furthermore, directors and teachers also reported that a lack of financial resources available to
 access professional development or other education and training as a challenge or barrier to
 gaining educational requirements. This was the top challenge for teachers, with 63% reporting
 this as a barrier and 38% of directors reporting it as a challenge for their staff.

TA supervisors and Quality First leadership staff

TA supervisors and Quality First leadership staff were asked about the benefits and challenges of how the professional development helps program staff learn about ECE best practices.

- About half of the TA supervisors and Quality First leadership staff interviewed (5/11) reported that professional development helps participants gain knowledge about ECE quality and best practices.
- Three of these respondents also noted that currently, professional development is largely provided by coaches.
- In addition, three of the TA supervisors did not know what kind of PD is offered to participants.

There was no real consensus around challenges; a few reported constraints like time or budget, while one mentioned consistency and replication across regions, and another noted that implementation for this component has changed resulting in less specificity in PD requirements.

Interaction among Quality First components

How do the Quality First components function independently and interact in combination to produce desired multilevel outcomes? As previously discussed, each Quality First component is intended to help participants increase their skills and knowledge of ECE best practices, which then contributes to improving their overall program quality.

Success in increasing participants' skills and knowledge is largely facilitated though the teaching of and support on concrete practices and materials that staff can use to meet the unique needs of their program. These practices are put into action in programs, as staff set goals and work towards achieving them, improving their overall quality throughout the process. The benefits and challenges of each component show how they have to work together to support participants' quality improvement. For example, assessment provides a foundation or baseline for where a program is at; coaching provides training and translation of the requirements and best practices to achieve participants' goals; financial incentives help remove barriers to improving the program environment; specialized assistance supports programs around specific practices required for health and safety, mental health, and inclusion; and professional development allows staff to access additional training to help them both learn new skills and meet standards for staff qualifications.

If one component is a weak link among the group, it can put a burden on the other components or cause barriers to success for participants. The following section describes participants' experiences with the quality improvement process, which includes their facilitators of and challenges to success.

Common facilitators of and challenges to participants' success in Quality First

Collaboration among TA providers and clear expectations for participation in the system continue to be among the key factors for participants' success in Quality First, even though participants struggle with how to interpret assessment results.

Regional council directors and Quality First leadership staff

During their interviews, regional council directors and Quality First leadership staff were asked about the most common challenges participants' face when going through the quality improvement process. Half (6/12) reported that not meeting the threshold scores of the assessments were a common challenge and one third reported that common challenges are usually related to program-specific issues like staff turnover, location, etc. When asked whether these challenges often occurred depending on a participant's star-level, two respondents noted staff qualifications as a main barrier to achieving a 3-star or higher and two reported that it is less about star-level and more about the participating program's context, whether it is in an area with access to a lot of resources or experiencing program-specific issues. When asked how these challenges are addressed, about half reported that ensuring collaboration and working as a team across coaches, assessors, and specialists is one important way to address participants' challenges. In addition, two of the interviewees reported that the Quality First advisory subcommittee is working to address participants' challenges.

Respondents were also asked about their perceptions of the most critical factors about a participant that will determine whether they are successful in Quality First. Most (9/12) reported that programs must have "buy-in" and be fully engaged with the quality improvement process to be successful. They were also asked how Quality First can address this, and half reported that clear communication about expectations and transparency about the process were needed.

Finally, regional council directors and Quality First leadership staff were asked about what additional supports or resources are needed for Quality First participants to further succeed in the quality improvement process. Over half (8/12) suggested changes to program structure (e.g. better communication and collaboration, greater focus on mental health supports, fostering communities of practice). Two said more flexibility in the system was required, making it a less "one size fits all" model. Other answers included more support on the CLASS assessment, more behavioral and emotional support for children, ensuring participants are ready to change, and more collaboration across Quality First's components.

Quality First participants

Attaining a higher star rating. One aspect of participants' success in Quality First is achieved through making program improvements that result in higher star ratings. Because of this, directors were asked about their goal for receiving a higher star rating, and directors and teachers were asked about barriers to achieving that goal.

Most Quality First directors (78%) reported that they are going for a 3- or 4-star rating on their next rating assessment. The top two perceived barriers to their program achieving a higher star rating were the CLASS assessment score and staff qualifications (both 39%). An additional 21% of directors selected other; among these respondents (n=85), 22% reported building or structural issues and 16% reported

unique program characteristics, such as using a Montessori curriculum or having a religious program, as their top barriers. Teachers also reported the CLASS assessment score was perceived as their top barrier (23%); however, teachers' second highest perceived barrier was staff turnover (24%). See Table 24 for additional detail on how teachers and directors perceive their top two barriers to achieving a higher star rating. ⁴⁷

Table 24. Comparison of barriers to achieving a higher star rating by Quality First directors and teachers				
Top two barriers to achieving a higher star rating	Directors	Teachers		
	(n = 406)	(n=639)		
The CLASS assessment score	39%	23%		
Staff qualifications	39%	17%		
Staff turnover	17%	24%		
The ERS assessment score	19%	15%		
Staff's understanding of the practices measured on the CLASS assessment		20%		
Staff's understanding of the practices measures on the ERS assessment		19%		
Teacher-Child ratios	5%	19%		
Curriculum practices	14%	8%		
Child Assessment practices	12%	6%		
Administrative other	3%	4%		
Other	21%	9%		

Data Source: Quality First director and teacher surveys

Educational qualifications and attainment. Professional development and educational attainment are important components of Quality First's improvement process, as well as an indicator of quality within the Quality First rating assessment. The main challenges directors reported facing when helping staff gain or achieve educational qualifications were a lack of financial resources available to access professional development or other education and training (38%) and a lack of time available to attend a class or training (56%). Teachers also reported these as their top barriers, at 63% and 46%, respectively.

Director and teacher responses did not vary much by star level or program type. Directors and teachers at all star levels were equally likely to report these as their top two barriers to education attainment (see Tables 25 and 26 for additional detail).

Table 25. Quality First directors' challenges with staff educational qualifications by star level							
What challenges does your program face in helping staff gain or achieve educational qualifications? (all that apply)	1-star	5-star					
	(n = 0)	(n = 122)	(n = 173)	(n = 94)	(n = 28)		
A lack of time available to attend a class or training	0%	60%	55%	55%	54%		
A lack of financial resources available to access professional development or other education and training	0%	43%	34%	38%	43%		
Our program does not have challenges with staff qualifications	0%	13%	21%	26%	25%		

⁴⁷ For additional detail on how director and teacher responses varied by star level, please see Appendix A.

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Table 25. Quality First directors' challenges with staff educational qualifications by star level						
What challenges does your program face in helping staff gain or achieve educational qualifications? (all that apply)	1-star	5-star				
	(n = 0)	(n = 122)	(n = 173)	(n = 94)	(n = 28)	
A lack of available professional development or other education and training opportunities	0%	20%	14%	14%	14%	
My staff are not motivated to obtain additional educational qualifications	0%	19%	15%	16%	11%	
Other	0%	7%	12%	6%	14%	

Data Source: Quality First director survey and First Things First administrative data

Table 26. Quality First teachers' challenges with their educational attainment by star level						
What challenges do you face in increasing your educational qualifications? (please select all that apply)	1-star	2-star	3-star	4-star	5-star	
	(n=4)	(n=136)	(n=173)	(n=97)	(n=35)	
A lack of time available to attend a class or training	50%	43%	48%	46%	51%	
A lack of financial resources available to access educational degree programs	25%	41%	32%	31%	57%	
A lack of financial resources available to access professional development or other training	75%	29%	26%	25%	23%	
I do not face any challenges gaining or achieving educational qualifications	25%	16%	16%	19%	9%	
A lack of available professional development or other education and training opportunities	25%	10%	8%	5%	3%	
Transportation to get to classes or trainings	0%	9%	9%	4%	3%	
I do not feel I need to attain any additional educational qualifications	0%	1%	0%	1%	3%	
Other	0%	3%	8%	4%	11%	

Data Source: Quality First teacher survey and First Things First administrative data

Classroom observational assessments. Directors and teachers were asked about the benefits and challenges of both the CLASS and ERS observational tools, which make up part of the Quality First rating assessment. To achieve certain star levels, programs must reach certain thresholds on these assessments.

Directors reported that the top two benefits of the CLASS included program staff seeing a connection between what the dimensions' measure and quality interactions with children (54%) and that staff are able to easily make improvements or changes to achieve a higher CLASS score (46%). Teachers also reported seeing a clear connection between what the dimensions' measure and quality interactions with children as the main benefit of the CLASS (53%) followed closely by most or all of the dimensions (instructional support, positive climate, negative climate, etc.) being easy for teachers to understand (51%). See Table 27 for additional detail.

Table 27. Quality First director and teacher perceptions of the top two benefits of the CLASS				
Benefits of the CLASS observational tool Directors Teacher				
	(n = 352)	(n = 586)		
My staff/I see a clear connection between what the dimensions' measure and quality interactions with children	54%	53%		

Table 27. Quality First director and teacher perceptions of the top two benefits of the CLASS				
Benefits of the CLASS observational tool	Directors	Teachers		
	(n = 352)	(n = 586)		
My staff are/I am able to easily make improvements or changes to help our program achieve a higher CLASS score	46%	43%		
Most or all of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for my staff/me to understand	42%	51%		
The CLASS reflects our program's cultural practices	23%	15%		
Not applicable, my program does not receive this assessment		9%		
Other, please describe	11%	9%		

Data Source: Quality First director and teacher surveys

Directors reported the main challenges of the CLASS were that some dimensions were difficult for staff to understand (47%) and staff cannot easily make improvements or changes that would allow the program to achieve a higher CLASS score (34%). Teachers' challenges with the CLASS were divided, with some respondents reporting that the CLASS was difficult to understand (36%), not understanding how what the dimensions' measure relates to quality interactions with children (32%), not being able to easily make improvements or changes that would allow the program to achieve a higher CLASS score (33%), and the CLASS does not reflect the program's cultural practices (28%). In addition, 34% of teacher respondents reported that they are not familiar with the CLASS tool. See Table 28 for additional detail.

Table 28. Quality First director and teacher perceptions of the challenges experienced with the CLASS				
Challenges experienced with the CLASS observational tool	Directors	Teachers		
	(n = 313)	(n = 548)		
Some of the dimensions (instructional support, positive climate, negative climate, etc.) are difficult for my staff/me to understand	47%	36%		
My staff are/I cannot easily make improvements or changes to help our program achieve a higher CLASS score	34%	33%		
My staff/I do not understand the connection between what the dimensions measure and quality interactions with children	32%	32%		
The CLASS does not reflect our program's cultural practices	24%	28%		
I don't know, I'm not very familiar with this observational assessment		34%		
Not applicable, my program does not receive this assessment		13%		
Other, please describe	24%	23%		

Data Source: Quality First director and teacher surveys

Two-star program directors were more likely to report that their staff do not understand how the CLASS dimensions relate to quality interactions than 5-star programs (40% compared to 16%), while 3- through 5-star program directors were more likely to report challenges with staff understanding some of the CLASS dimensions compared to 2-star programs (52%, 58%, and 47% compared to 32%, respectively). This could be because many 2-star programs have not received a CLASS assessment, unless they have gone for a 3-star rating. Teacher responses were mostly even across star levels with the exception of seeing a clear connection between what the dimensions' measure and quality interactions with children.

⁻⁻ indicates that the response was not an option for the survey question

⁻⁻ indicates that the response was not an option for the survey question

The percent of teachers that reported this as a benefit of the CLASS steadily decreased from 68% at the 5-star level to 49% at the 2-star level. No teachers from 1-star programs reported this as a benefit.⁴⁸

For the ERS, directors reported that the top two benefits were that staff can easily make improvements or changes to help the program achieve a higher ERS score (68%) and that staff see a clear connection between what the scales measure and classroom quality (49%). Teachers also reported these as the top two benefits of the ERS. See Table 29 for additional detail.

Table 29. Quality First director and teacher perceptions of the top two benefits of the ERS				
Benefits of the ERS observational tool	Directors	Teachers		
	(n = 362)	(n = 616)		
My staff/I am able to easily make improvements or changes to help our program achieve a higher ERS score	68%	57%		
My staff/I see a clear connection between what the scales measure and classroom quality	49%	52%		
The scales are easy for my staff/me to understand	38%	35%		
The ERS reflects our program's cultural practices	20%	20%		
I don't know, I'm not very familiar with this observational assessment		23%		
Other, please describe	12%	12%		

Data Source: Quality First director and teacher surveys

Teacher and directors' challenges with the ERS were split with about one third of respondents each reporting that: the scales were difficult for staff to understand, staff do not understand the relationship between what the scales measure and classroom quality, staff cannot easily make improvements or changes that would allow our program to achieve a higher ERS score, and that the scales did not reflect their program's cultural practices. In addition, 36% of teacher respondents reported that they are not familiar with the ERS tool. See Table 30 for additional detail.

Table 30. Quality First director and teacher perceptions of the challenges experienced with the ERS				
Challenges experienced with the ERS observational tool	Directors	Teachers		
	(n = 310)	(n = 562)		
My staff/I cannot easily make the improvements or changes that would allow our program to achieve a higher ERS score	32%	39%		
The scales do not reflect my program's cultural practices	34%	35%		
My staff/I do not understand the relationship between what the scales measure and classroom quality	34%	31%		
The scales are difficult for my staff/me to understand	34%	27%		
I don't know, I'm not very familiar with this observational assessment		36%		
Other, please describe	31%	31%		

Data Source: Quality First director and teacher surveys

Two-star program directors were more likely to report that their staff do not understand the ERS scales than 5-star programs (41% compared to 17% respectively) and they were more likely to report that their

⁻⁻ indicates that the response was not an option for the survey question

⁻⁻ indicates that the response was not an option for the survey question

⁴⁸ See Appendix A for additional detail on director and teacher responses by star level.

staff cannot easily make improvements or changes that would allow the program to achieve a higher score compared to 5-star programs (40% compared to 6% respectively). Teacher responses were mostly even across star levels.⁴⁹

Overall perceptions of Quality First's role in improving program quality

Teachers and directors were also asked about their overall perceptions of Quality First. Most directors (85%) agreed or strongly agreed that they believe their program is of higher quality because they joined Quality First, and almost all (91%) agreed or strongly agreed that they have made changes to their program as a result of joining Quality First. While the majority of teachers also believed that their program is of higher quality and that they have made changes to their program as a result of joining Quality First, overall they were slightly less positive with more neutral responses compared to directors (see Table 31 for more detail).

Table 31. Director and teacher perceptions of Quality First						
Perceptions of Quality First	Direc	Directors (n = 374) Teac			hers (n = 539)	
	Neutral	Agree	Strongly Agree	Neutral	Agree	Strongly Agree
I believe my program is of higher quality because we joined Quality First	7%	31%	55%	25%	40%	25%
We have made changes to our program as a result of joining Quality First	6%	36%	56%	18%	46%	31%
My experience with Quality First has been what I expected	15%	39%	37%			
I would recommend that other programs join Quality First	10%	29%	56%			
I have made changes in my classroom as a result of my program joining Quality First				17%	45%	32%

Data Source: Quality First teacher and director Surveys

Three quarters of directors agreed or strongly agreed that their experience with Quality First has been what they expected; however, this is slightly less positive than their other feedback about how Quality First has impacted their program quality. Most directors (85%) agreed or strongly agreed that they would recommend that other programs join Quality First.

Furthermore, while directors reported financial incentives and scholarships as the most beneficial aspect of participating in Quality First (54%), about 30% also reported that coaching and achieving goals/making improvements were also beneficial aspects. Almost all directors (90%) reported that they have a somewhat or extremely positive impression of Quality First as a tool and resource for improving program quality.

Summary

While Quality First participants and stakeholders have different perceptions of the purpose of the system, overall, participants do report a positive and successful experience in the system and

⁻⁻ indicates that the response was not an option for the survey question

⁴⁹ See Appendix A for additional detail on director and teacher responses by star level.

stakeholders have many positive things to say about how the components help increase skills and improve program quality.

Limitations

There were a couple of limitations to this evaluation. First, all surveys were only made available online and in English. If a program requested a paper copy, one would have been provided; however, this was not actively presented as an option during data collection. Additionally, the Quality First program leadership interviewees were selected based on their specific roles in Quality First, so they were not randomly selected. To obtain representation from rural, urban, and tribal regions, and staff with varying years of experience with Quality First, regional council director and TA supervisor interviewees were selected from a smaller pool of potential respondents that was developed by First Things First.

Summary and considerations for Quality First's system design

This evaluation of the Quality First system design examined the conceptual framework and implementation of the system and how the system is perceived by key stakeholders in the ECE field. In this section, we provide initial considerations for Quality First regarding the system design and implementation. We organize the considerations around three of the five components that are typically included in QRIS (see Figure 1): quality improvement supports, financial supports and incentives, and engagement and outreach. The other two components, quality standards and system monitoring and accountability, will be addressed in subsequent parts of the study. Quality standards will be evaluated as part of the validation of the rating scale to assess how Quality First rating indicators are functioning and linked to external observations of quality (see Chapter 3). System monitoring and accountability will be examined through the implementation analysis of the Quality First Extranet data system (see Chapter 2), and the rating scale validation analysis to assess the effectiveness of the Quality First star rating structure (see Chapter 3). Considerations for the other three components – quality improvement supports, financial supports and incentives, and engagement and outreach – are described below. These initial considerations were based on a review of Quality First documentation, key findings from the evaluation to date, and a review of existing evidence and comparisons to other QRIS.

Quality Improvement supports

Consideration: Allow for more flexibility in coaching intensity hours requirements

Coaches may need more flexibility to identify the number of coaching hours that are appropriate for each program rather than using a set number. For example, coaches could work with directors to set an agreed upon coaching frequency and hours that aligns with the types of goals the program sets. Almost all coaches who responded to the implementation survey reported deviating from the number of required intensity hours. Because a majority of their reasons for deviating were in response to requests from teachers for extra information, training, or a specific request for extra time, adjustments to the hours requirements may be needed to allow coaches to be more flexible in how they split their time across programs. In addition, regional council directors and Quality First leadership staff identified

meeting intensity hours as the main challenge of implementing the coaching model, while TA supervisors also called out coaches' time as one of the main challenges for coaching supports helping program staff learn best practices.

Consideration: Work with regional councils to increase access to more specialized TA and better communicate what these services can provide

Among the respondents, there was a high level of agreement that the specialized assistance (CCHCs, mental health consultants and inclusion specialists) were valuable components of Quality First. However, regional council directors and Quality First leadership staff felt that even with CCHCs, because they aren't required as a part of participation in Quality First, they are not as widely used by participants, and not all program participants understand that the CCHCs can do more than provide basic health and safety consultation. More communication is needed around the services provided by CCHCs to help participants better understand this type of assistance that is available to them and could increase their use.

Additionally, First Things First could work with the regional councils to identify opportunities to offer additional specialized assistance to participants in the form of mental health consultants and inclusion specialists, as these were seen by program participants as valuable resources. Moreover, the types of requests that coaches get from the Quality First participants should be examined to see if these other types of specialized assistance (such as mental health consultants and inclusion specialists) can help reduce the workload for coaches if they were more readily available to more participants. Lastly, since mental health consultants and inclusion specialists are only available depending on regional funding, and are thus not available to all Quality First participants, First Things First could examine whether there are ways to make these services more widely available to all Quality First participants.

Consideration: Work with TA providers to help them individualize the professional development and coaching they provide to better meet programs' needs when there is limited time available.

Professional development is considered beneficial to program quality improvement, both what is provided by Quality First coaches as well as trainings and professional development that participants take on their own. However, time constraints present a challenge. Overall, respondents felt that the professional development activities that the coaches provide to the Quality First participants are beneficial to improving program quality. One of the major challenges identified in the survey and in the interviews, is that the coaches are stretched for time and find it difficult to meet all of the professional development needs of the participants. This was also documented in findings that the coaches typically provide more than the required number of coaching intensity hours, in order to try and meet the programs' needs. Additionally, while the Quality First participants indicated that the trainings and professional development that they take on their own is helpful, dealing with time constraints and lack of available funding are issues to accessing all of the professional development that they need.

Consideration: Consider providing additional training or professional development to TA providers to help them more effectively work with participants on how to interpret and use assessment results

Almost all Quality First stakeholders and TA providers agree that the assessments provide a concrete way to identify areas of program improvement, but that participants have difficulty using the results.

While the majority of respondents interviewed indicated that the assessments are a clear and objective way to measure a program's quality, a common challenge reported was that programs have a difficult time interpreting and using the assessment results. Some TA providers raised the possibility of providing immediate feedback reports to programs that can help them work on quality improvement efforts in their programs. Additionally, when asked about perceived barriers to achieving a higher star rating, Quality First participants reported that the CLASS assessment score and staff qualifications requirement were the most challenging. When asked about the main challenges in helping staff gain or achieve educational qualifications, participants indicated that a lack of financial resources available to access professional development or other education and training, and a lack of time available to attend a class or training were their top issues.

Consideration: Provide more direct support to program directors and staff to help them better understand the content covered in the CLASS and ERS assessment tools

Both director and teacher survey respondents reported that they perceived their top barriers to achieving a higher star rating were the criteria of the CLASS and staff qualifications (which is part of the QFPS). While the CLASS scoring requirements were perceived to be a major challenge for all program staff, staff qualification requirements were seen as a larger challenge for directors than it was for teachers. Findings from the validation study, however, indicate that the ERS assessment scoring criteria is a larger challenge than the CLASS criteria for many programs.

Financial supports and incentives

Consideration: Offer tiered approaches to financial incentives and/or more flexibility in how the incentives can be used in higher star rated programs (3-5 star levels)

Respondents were in agreement that financial incentives were beneficial to helping programs improve quality. Overall Quality First stakeholders (i.e., regional council directors, leadership staff, and TA supervisors), indicated that financial incentives removed barriers to purchasing materials and accessing professional development. However, about a third of respondents felt that higher star level rated programs may not need the level of financial incentives they currently receive (particularly because higher financial incentives may not be feasible to offer over time). On the other hand, directors in higher star rated programs (4- and 5-star), reported that a lack of available financial resources to use for professional development, education or training, was a barrier to increasing staff qualifications. This may be a result of restrictions around how the Quality First incentives can be used.

An additional challenge to the incentives is the lack of flexibility in how they dollars can be spent. For example, staff in programs with higher star levels can spend the incentives on professional development or trainings, but participants report that their staff does not have the time to attend those trainings, especially with programs located in rural areas of the state. Because higher star level programs are already meeting higher staff education levels, there may be less of a need for financial incentives that are targeted toward staff professional development or training.

Engagement and outreach

Consideration: Improve communication around the purpose and expectations of Quality First to all stakeholders

Quality First stakeholders, implementers, and participants indicated that they have a shared understanding about the overall focus of the system, but there appears to be less clarity around expectations for participation. Results from the surveys and interviews indicated that most Quality First stakeholders believe the main goal of the system is improving the quality of ECE in Arizona. When looking at beliefs about the system by respondent type however, Quality First leadership staff and TA supervisors emphasize that the main goal of the system is about improving the *quality* of child care, while Quality First participants and regional council directors give weight to increasing *access* to quality care options in Arizona. Additionally, both Quality First participants and nonparticipants put an emphasis on Quality First serving a role in increasing quality ECE options and providing access through child scholarships for additional families to be served, though it is unclear if they are connecting this increase in quality options to their own individual program improvement.

While there is a common understanding of the general purpose and objective of Quality First, results from the evaluation suggest that programs could be better informed about what to expect as a participant in Quality First. Only a little over one-third of directors felt that their experience in Quality First was what they initially expected. In addition, system implementers would benefit from increased collaboration efforts. For example, TA providers reported that collaboration among TA providers (i.e., coaches, assessors, CCHCs) is a major challenge in helping Quality First participants learn and improve. Quality First stakeholders stressed the importance of all TA providers working together to ensure that participants fully understand the system's requirements and standards, and are not overwhelmed by the amount of information they receive.

Quality First stakeholders' assert that participant engagement with the system is the most critical factor for its success. Yet, Quality First participants reported a lack of clarity regarding all of the different program requirements, including the rating assessment process, as a significant challenge they face as a participant in the system. For example, coaches reported that the top three most common goals programs typically want to achieve on their first on-site visit are all related to answering questions or getting more information about Quality First. Thus, revising or creating new materials or processes to support participants' understanding of the system and improving their engagement will be helpful.

Consideration: Ensure programs are ready for participation in Quality First

Respondents indicate that assessing a program's level of readiness for change and providing clear expectations regarding the application and selection process are two activities that could support program participation. Additionally, waiting lists and unclear expectations for participation in Quality First were common challenges reported by participants and stakeholders. However, the respondents were split in their perceptions of the waiting lists, with about half of the regional council directors and Quality First leadership staff reporting that wait lists should be expected, while the other half felt like the wait time was too lengthy.

When Quality First nonparticipants were asked about their considerations for joining Quality First, half reported that their program is considering participating in Quality First; however, one of their top two reasons for not participating was that they do not have sufficient information to make a decision. They

also reported that another reason for not participating was that their region currently has a waiting list for Quality First. Overall, the findings indicate a need for more clarity and communication around what Quality First is, and expectations for participation in the system.

Lastly, in general program directors were more positive in their beliefs and perceptions of Quality First than teachers. This may be a result of Quality First supports being more targeted at the program-level than the classroom level, and therefore teachers may not always see the direct benefits of their participation. Thus, it may be important to focus on ensuring all staff within a program are ready for participation in Quality First instead of just the directors or leadership.

Chapter 2: Quality First Data Practices and Systems

Sarah Friese, Ashley Hirilall, Claire Lowe, Rebecca Starr, Ph.D., Dale Epstein, Ph.D.



Overview

The purpose of this component of the study was to review the Quality First data system and related data practices, to identify areas of success and areas for improvement, and provide actionable recommendations to First Things First. Child Trends conducted this evaluation to determine whether the existing data elements and infrastructure support effective program management, program evaluation, and quality improvement. We examined how data are being collected to support the coaching, assessment, and child care health consultation (CCHC) strategies, as well as the administration of the initiative itself. The findings described in this chapter are organized using a five-stage data cycle (i.e., planning, collection, processing, management, distribution) for collecting and using high-quality QRIS data. This framework, described in detail in the *Overview of Data Systems and Processes in QRIS* section of this chapter, also informed the structure and content of the data collection protocols, as well as the analyses used to interpret the findings.

This evaluation was designed to address the following research questions:

- To what extent are standardized procedures used to collect data for each of the five Quality First program components, and the other First Things First strategies that support Quality First?
- How do the data for each of the five Quality First program components, and the other First Things First strategies that are part of Quality First, support ongoing program management, and are they adequate to meet the initiative's needs?
- What new data elements, data collection mechanisms, or modifications, if any, are needed to address the goals of the subsequent phases of the Quality First Implementation and Validation Study?
- What are the quality control procedures used to collect the data for each of the five Quality First program components?
- What improvements can be made to the design of the Quality First database system to capture, store, and report Quality First data elements and to refine data management practices?
- What data system changes are needed to ensure that data collection and data reporting are sufficient for ongoing program management and quality improvement of Quality First?
- How do the data for each of the five Quality First program components, and the other First Things First strategies that are part of Quality First, support quality improvement of Quality First?

Study design and procedures

The Child Trends team used a variety of data collection and analytic methods to evaluate Quality First's data system and practices to develop recommendations. This included: developing a crosswalk between the *INQUIRE Data Toolkit's* common data elements in QRIS and Quality First's data elements; conducting interviews with key informants; developing an implementation survey for technical assistance (TA) and Quality First Assessment staff; conducting focus groups with assessors, coaches, and CCHCs; and carrying out observations of assessors, coaches and CCHCs. The groups involved in the data collection process for this evaluation represent decision-makers, implementers, and users of the data system.

Key findings

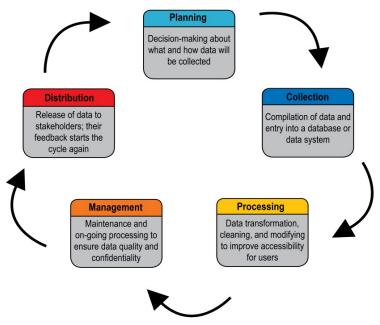
The findings of this evaluation suggest that Quality First incorporates most of the best practices regarding data to successfully implement and improve the system. Furthermore, Quality First is already well-developed in terms of its data practices, and additional improvements would be mostly refinements to the current system, with only a couple of large-scale changes. Specific key findings include:

- There is a high level of standardization (i.e., implementation of data-related processes
 developed by Quality First administration staff at First Things First) of the data collection and
 entry procedures within Quality First, and documentation is thorough and available to staff. This
 is especially true for the assessment process, which could be used as a model for making the
 coaching and CCHC processes even more standardized.
- Processes and systems are in place to protect the privacy and confidentiality of Quality First participants; however, the continued heavy use of paper by field staff (i.e., TA providers; teachers; directors) presents a risk to the confidentiality of data about programs and possible error when transferring data to the Extranet. More web-based data entry tools could be phased in to help eliminate some of the paper data collection processes.
- The Extranet data system is a strong technology on par with recommendations for the functions and categories of data that should be included in QRIS data systems. Its primary function is as an accountability system, with a secondary function to support case management.
- Quality First staff report wanting additional "standardization" of the data being entered into the
 Extranet, to minimize the amount of narrative data required. However, there should be a
 balance between creating more standardization and still collecting open-ended, narrative data
 which can be very informative. They also reported that increased functionality to aggregate data
 and view reports will help with case management.
- Quality coaches have less understanding of why they are required to collect certain data compared to staff in other roles. Coaches may need additional support in understanding why certain data are being collected.
- Direct support staff do not feel that Quality First participants have a strong understanding of
 why or how the data collected about their programs are used. Participants may need more
 information to explain why specific data are being collected from their programs and how it will
 be used.

Overview of Resources about Data Systems and Practices in QRIS

Several resources have been produced that describe QRIS data systems and recommend data best practices in QRIS. For this chapter, we draw heavily on eight existing resources. One is a 2014 brief entitled *Best Practices in Ensuring Data Quality in Quality Rating and Improvement Systems* (Friese, Tout, & Kirby, 2014), which outlines how to collect and use high-quality QRIS data by employing a five-stage cycle of planning, collection, processing, management, and distribution (see Figure 4).

Figure 4. Cycle of data collection, management, and use



Source: Best Practices in Ensuring Data Quality in Quality Rating and Improvement Systems, (Friese et al., 2014).

At each stage of this cycle, recommendations are made about specific practices that can be implemented to support the collection and use of high-quality data in QRIS. In the planning stage, recommended practices include: 1) decide which data elements are necessary to collect, prior to program implementation, 2) develop a plan to collect data, 3) identify which data systems need to be linked to the QRIS, 4) establish a system of unique identifiers, and 5) develop an infrastructure of support for the staff who are responsible for collecting data. In the collection phase, the key practices are: 1) use web-based, on-site data collection methods and 2) collect the same set of data elements about all programs participating in the QRIS. During the processing stage, the key practices are: 1) input data at the rawest level possible and 2) avoid overwriting of historical data. The important practices in the management phase are: 1) maintain up-to-date and detailed data documentation and 2) make data knowledge institutional rather than person-centric. Finally, in the distribution phase, the key practices are: 1) ensure data privacy and confidentiality and 2) automate reporting.

Note that this brief highlights only *some* of the practices that QRIS administrators can implement to ensure they are collecting high-quality QRIS data. There are additional best practices for each stage in the cycle that align with general data management best practices that would be supportive of the collection of high-quality data in QRIS. It is also important to note that this cycle is an on-going process, such that in mature QRIS, each stage is occurring concurrently. Nevertheless, this data cycle presents a framework for evaluating data systems and practices within a QRIS, and therefore was used to guide the methodology and analyses for this evaluation of the Quality First data system.

Most QRIS utilize *some* of the practices described in the *Best Practices in Ensuring Data Quality* brief to standardize the procedures for collecting, managing, analyzing, and using their data. That is, they have created at least some policies around how data should be collected, managed and used; they train their staff to use these policies; and they monitor their fidelity of implementation. However, the intentionality of these practices, and implementation of them in adherence to data management best practices, varies substantially between QRIS. States with QRIS that have been in operation for many years have had the opportunity to develop and refine their data practices over time. For example, Pennsylvania's Keystone STARS QRIS is one of the country's oldest systems, having been in operation since 2002, and has developed more advanced data-related practices. QRIS data in Pennsylvania are part of a fully-integrated early childhood data system called PELICAN that includes QRIS, school-based pre-K, and Head Start data about programs, children, and the workforce. The development of complex QRIS data systems like PELICAN require an investment of resources that might not be available to other QRIS that are in the earlier stages of developing their data-related practices and systems.

Another brief, Best Practices in Data Governance and Management for ECE: Supporting Effective Quality Rating and Improvement Systems (Weber & Iruka, 2014), describes and recommends data governance structures and policies to best support data management in QRIS. This brief focuses on the role that data systems--integrated data systems in particular--play in supporting QRIS planning, operations, monitoring, and evaluation. They suggest that the most robust QRIS data systems are embedded in larger early childhood data systems that integrate data across multiple sectors like education, human services, and health. Recognizing that the development and implementation of comprehensive early childhood data systems that include QRIS is a challenging and resource-intensive endeavor, the authors recommend integration of siloed data systems using common data elements as an appropriate alternative when full integration is infeasible.

Several other resources address the importance of using common data elements in QRIS. The INQUIRE⁵¹ Data Toolkit is a resource designed to support states' efforts in building a strong data infrastructure for quality initiatives, including QRIS (Friese, King, & Tout, 2013). The INQUIRE Data Toolkit includes guidance to states about which data elements are necessary to collect to support quality initiatives, and how those data can be used to answer policy and research questions of interest. It provides a common

⁵⁰ More information about the PELICAN data system is available on the Pennsylvania Early Learning website at: http://www.pakeys.org/pages/get.aspx?page=PELICAN

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. One of the resources designed as part of this project is the INQUIRE Data Toolkit.

set of data elements related to quality that align with the Common Education Data Standards (CEDS)⁵² data elements for P-20W.⁵³ The *INQUIRE Data Toolkit* is intended to help QRIS administrators and data analysts understand what data are necessary to collect to support the implementation and improvement of QRIS, and how those data can be collected in a standardized way over time, allowing for robust data analysis to answer questions of interest.

The Quality Rating and Improvement System (QRIS) Evaluation Toolkit (Lugo-Gil et al., 2011) outlines the methods and data elements necessary for completing an evaluation or validation study of a QRIS. Data used for QRIS evaluation are often different from, or in addition to, data used for program implementation purposes. When QRIS administrators attempt to use program implementation data for evaluation purposes, they find it is often lacking in specificity or unable to address important research questions. The Evaluation Toolkit highlights some of the important types of data that are needed to complete a QRIS evaluation and highlights the challenges of using program implementation data. For example, TA data that are collected primarily for case management purposes might not be adequate for evaluation purposes, because data might be missing, collected differently across agencies providing TA, or unavailable at the rawest level. Challenges to using program data for evaluation purposes exist for other types of QRIS data as well. The Evaluation Toolkit outlines strategies for how, if possible, typical QRIS data can be used to meet multiple goals.

Finally, two resources created to support states receiving Early Learning Challenge TA describe the types of data and data system requirements that should be in place to support data collection and use in QRIS. The resource *Early Childhood Workforce Data: Collection Practices and Possibilities* (ELC TA Program, 2015) outlines the types of workforce data that are needed to support administrative tasks and policy decisions in QRIS. The authors note that no one federal source exists to collect data about the ECE workforce, although a few existing federal data collection efforts (e.g., Head Start, IDEA Part B and C) do include these types of data elements. In the *Using Data to Strengthen Technical Assistance* (ELC TA Program, 2015) resource, they outline ways in which the data collected about QRIS TA can be enhanced and feed more directly into a cycle of improvement of the coaching and consultation process. This resource suggests that TA data are often collected and used to meet a variety of needs, such as: tracking service delivery, monitoring fidelity of implementation, supporting TA providers, and evaluating the progress of quality improvement initiatives.

Some information also exists on the extent to which the 40 state and local QRIS in the United States and associated territories are implementing data-related practices and using data systems. This information is available from the website QRIScompendium.org (The Build Initiative & Child Trends, 2015). In 2015, out of the 40 state and local QRIS across the country, all but one QRIS were using some sort of data system to capture and manage information collected for the QRIS. The type and amount of data being stored in these systems vary, with rating data being the most commonly collected (37), followed by indicator scores (31), licensing information (31), and observational assessment scores (30). Data in QRIS data systems were most often being used for reporting and monitoring purposes (37), followed by evaluation (36), ratings determinations (33), and program implementation (29). Thirty-four of the 40

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⁵² The Common Education Data Standards (CEDS) is a national effort to provide a shared vocabulary to understand, compare, and exchange data about P-20W education institutions. More information about CEDS is available on their website at: https://ceds.ed.gov/

⁵³ P-20W is a longitudinal data system containing data from preschool (P) through grade 20 or higher (20) and the workforce (W).

systems had an automatic feed or link to another QRIS-related data system, with the most common links to state licensing (27), workforce registry (27), and subsidy (25) databases or data systems.

No specific standard exists that outlines the functions that a QRIS data system should include to support the implementation and improvement of the QRIS. The resource, *Key Considerations for Data Systems that Support TQRIS*⁵⁴ (ELC TA Program, 2015), suggests some of the important functions of a QRIS data system, such as: meeting QRIS business and reporting needs, managing data and documentation, interfacing with other data systems, and providing an infrastructure to support training of the data system users. This resource suggests that QRIS data systems include data elements related to programs' applications, rating designations, oversight of observational assessments, management of TA providers, and tracking of financial incentives. Seven of 39 QRIS are using customizable off-the-shelf (COTS) data systems created specifically to manage QRIS data, with the Web-Based Early Learning System (WELS) being the most common, used by five QRIS. The functions and types of data included in these data systems offer additional insights as to what developers and managers of QRIS data systems, and consumers of QRIS data, need for day-to-day operations and long-term improvements to the QRIS. WELS, for example, includes categories of data related to site information and characteristics, accreditation, curriculum, the workforce, observational assessments, rating, and program funding.

Overall, the available resources on QRIS data systems and processes provide some guidance and recommendations for data planning, collection, management, and use. Ultimately these practices are influenced and driven by the specific needs of the QRIS and the available infrastructure in the state and/or region. Next, we provide a description of our methodology and research questions used to evaluate Quality First's data system and data practices. This is followed by a brief overview of the Quality First rating and implementation process, and a description of the data being collected to support the individual strategies within that process. Lastly, we present key findings from the evaluation, which are organized by the five stages of the data cycle presented above, and provide initial considerations and recommendations for improvements.

Data System Evaluation: Purpose & Methodology

The purpose of this evaluation is to review the Quality First data system and related data practices, to identify areas of success and areas for improvement, and provide actionable recommendations to First Things First.

Specifically, this chapter is designed to support First Things First in evaluating its data system and data practices, to ensure that data are collected and that there are infrastructure supports in place, as needed. The findings described in this chapter are organized using a five-stage data cycle (i.e., planning, collection, processing, management, distribution) for collecting and using high-quality QRIS data. This cycle framework, described in detail in the *Overview of Data Systems and Processes in QRIS* section of this chapter, also informed the structure and content of the data collection protocols, as well as the analyses used to interpret the findings.

⁵⁴ Tiered Quality Rating and Improvement Systems (TQRIS) is another alternate way of referring to QRIS, where tiered refers to the rating aspect of the systems that is used to distinguish programs' quality.

Research questions

The research team developed a set of research questions in coordination with First Things First. The questions are grouped according to the stage in the data cycle to which they correspond.

Data cycle stage 1: Planning

• To what extent are standardized procedures used to collect data for each of the five Quality First program components, and the other First Things First strategies that support Quality First?

Data cycle stage 2: Collection

- How do the data for each of the five Quality First program components, and the other First Things First strategies that are part of Quality First, support ongoing program management, and are they adequate to meet the initiative's needs?
- What new data elements, data collection mechanisms, or modifications, if any, are needed to address the goals of the subsequent phases of the Quality First Implementation and Validation Study?

Data cycle stage 3: Processing

• What are the quality control procedures used to collect the data for each of the five Quality First program components?

Data cycle stage 4: Management

- What improvements can be made to the design of the Quality First database system to capture, store, and report Quality First data elements and to refine data management practices?
- What data system changes are needed to ensure that data collection and data reporting are sufficient for ongoing program management and quality improvement of Quality First?

Data cycle stage 5: Distribution

 How do the data for each of the five Quality First program components, and the other First Things First strategies that are part of Quality First, support quality improvement of Quality First?

Methodology

The research team used a variety of data collection and analytic methods to evaluate Quality First's data system and practices to develop recommendations. This included: developing a crosswalk between the *INQUIRE Data Toolkit's* common data elements in QRIS and Quality First's data elements; conducting interviews with key informants; developing an implementation survey for TA and Quality First Assessment staff; conducting focus groups with assessors, coaches, and child care health consultants (CCHCs); and carrying out observations of assessors, coaches and CCHCs. The groups involved in the data collection process for this evaluation represent decision-makers, implementers, and users of the data system. Table 32 provides an overview of study participants and the data collection strategies for this evaluation.

Table 32. Number of data system evaluation participants and data collection methods						
Evaluation participant type	Interview	Survey	Focus group	Observation		
Quality First and First Things First program leadership	5					
Quality First TA supervisors (coaching coordinators, assessors, CCHC supervisors)	8	18				
Quality First TA providers (coaches, assessors, CCHCs)		116	23*	3		

^{*}Across three focus group sessions.

Additionally, the research team reviewed Quality First documentation, (e.g., codebooks and manuals) and had conversations with First Things First leadership staff (i.e., the Early Learning Senior Director, Research and Evaluation, Information Technology (IT) Lead, Data Warehouse Manager), to develop a basic understanding of the Extranet (Quality First's data system) and how data-related practices and technologies are implemented in Quality First. Each of the data collection and analytic methods is described in more detail below. The purpose of this evaluation was to review existing data practices and evaluate the data infrastructure to determine if it was adequate to meet the needs of Quality First staff and stakeholders. Therefore, the data collection procedures were targeted to specific stakeholders and staff who were the most knowledgeable about the Quality First data system and practices.

Review of existing literature and resources

As an initial step in the data system evaluation, the Child Trends research team completed a scan of existing literature and other resources (e.g., TA materials) about QRIS data practices and systems. The purpose was to provide a synthesis of data-related QRIS best practices and to understand how Quality First fits within the context of other QRIS nationally. Findings from the scan informed the development of data collection protocols for the focus groups, key informant interviews, and an implementation survey with TA providers. It also provided a context within which to develop the initial considerations for improvements and refinements to Quality First's data practices.

Crosswalk with the INQUIRE Data Toolkit crosswalk

To better understand the type of data collected for Quality First, a review was completed of the Quality First Extranet data elements codebook. A crosswalk was then completed using the data elements in the codebook and comparing them to the *INQUIRE Data Toolkit* (Friese et al., 2013), a resource that lists a series of common data elements for QRIS. The *INQUIRE Data Toolkit* makes recommendations for data elements—at the child, family, practitioner, classroom, program site, organization, and system levels—to be included in quality improvement data collection efforts. This crosswalk was completed to determine alignment and discrepancies between the data collected by Quality First and standards related to common early care and education (ECE) data elements typically collected and used in a QRIS.

Quality First key informant interviews

Key informant interviews were conducted by phone in February 2016. A total of 13 interviews lasting approximately 60 minutes each were conducted with First Things First leadership, and TA and assessment supervisors. All five First Things First leadership staff working on Quality First who have knowledge about data collection and use practices were included in the interview process. These staff included the IT lead, Quality First program director, assessment coordinator, early learning senior director, and a coaching coordinator. The remaining eight interviewees were TA or assessment

supervisors representing: coaching, assessment, CCHC, and specialized assistance TA providers (Inclusion and Mental Health Specialists). Two interviewees of each role were selected, to ensure a diverse set of experiences and insights. The eight interviewees were selected in part based on suggestions made by First Things First staff, as representatives who are knowledgeable about data-related practices in Quality First. A shared interview protocol was used for all the interviews and included the following constructs: types of data collected; use of technology; staff experience and knowledge with data collection and use; data management practices; and organizational practices for using data (see Appendix B for the interview protocol).

Quality First implementation survey

An implementation survey was completed with Quality First TA staff, which included a subset of questions related to the processes they use to collect and manage data. Respondents were asked about the appropriateness of the amount and type of data they and their supervisees collect; the usefulness and functionality of the Extranet data system; and improvements that could be made to Quality First data practices that would help them in their jobs.

The survey was sent to 161 active email addresses for coaches, coaching supervisors, assessors, lead assessors, assessor supervisors, CCHCs, and CCHC supervisors. We received responses from 134 of those contacted, for a response rate of 83%. Just over half of the implementation survey respondents were coaches or coaching supervisors, just under one third were assessors or assessor supervisors, and 13% were CCHCs or CCHC supervisors. These percentages are similar to the total population of these staff, as the Quality First coaching, assessor, and CCHC grantees account for 56%, 28%, and 16% of the total direct-support or in-the-field staff, respectively.

Quality First focus groups

Focus groups with Quality First staff were completed to gather information from direct-support staff about how they collect and use data in their jobs. There were three focus groups, each one representing main Quality First strategies (i.e., coaching, assessment, and CCHC). The goal of the focus groups was to understand coaches, assessors, and CCHCs (sometimes referred to in this chapter as TA providers) perceptions of their successes and challenges in collecting and managing data. The focus groups were not intended to be representative of all TA providers; rather, they were used to reveal in more detail possible issues that might prevent staff from implementing data-related tasks in the highest quality way. There was a focus group for quality coaches (9 participants), for CCHCs (8 participants), and for assessors (6 participants). Staff within proximity of the First Things First offices who had not already been interviewed were invited to participate. The total number of participants in each group was capped at ten, to facilitate group discussion. The focus groups were completed in-person and lasted approximately an hour. Focus group participants were asked questions that were similar in nature to the key informant interview questions. Topics included: type and amount of data collected, use of technology, data accuracy, data-related training, data collection challenges, and use of data in Quality First.

Quality First staff observations

Observations were completed with three Quality First staff during their visits with participating programs. The purpose of these observations was for the Child Trends team to gather in-person information about how staff collect data when working directly with participants. Observations were conducted with: an assessor who conducted an ECERS-R observation; a CCHC who completed health and safety checklists with two programs; and a coach who conducted an observation of a classroom and reviewed the results of an ECERS-R assessment with the director. A checklist of data management

practices was completed during each observation, and staff were asked questions following the observation to gather more information and to report about whether the visit was typical for them. Since only three observations were completed, the information gathered during the visits was used solely as supporting information to the other methods used in this evaluation. Additionally, these observations were used to provide more insight to the research team about typical daily data collection procedures.

Analysis

The findings from these six data collection methods were analyzed for themes related to the research questions. Additionally, findings were analyzed looking within and across the Quality First strategies that collect and use data (i.e., coaching, assessment, CCHC, administration). We found commonalities in how data are used in each of the Quality First strategies, but also data practices that are specific to each strategy.

Recommendations in this chapter were based on: 1) best practices from the field around collecting and using high-quality data; 2) findings from themes that emerged and were voiced across different types of respondents; and 3) findings reported from a small group of respondents, or a single respondent, if they played a unique and individualized role in Quality First's data practices. For example, if the First Things First Information Technology Lead mentioned a concern or possible improvement that was not raised by other key informants, or in other data collection methods, but was considered in line with best practices or seen to support quality improvement and effective program management and evaluation, it may be included as a recommendation.

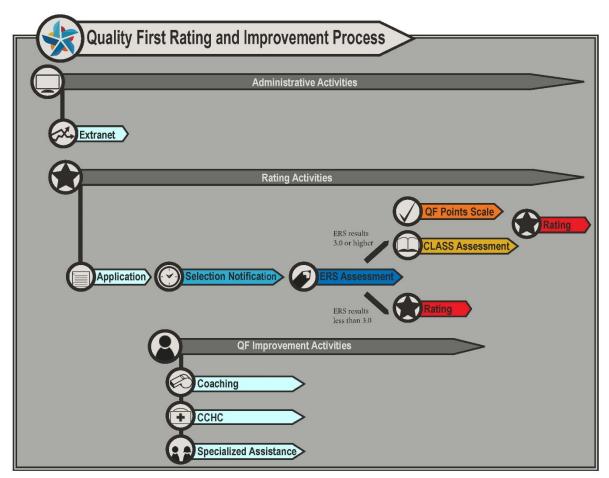
The findings and recommendations are organized using the five-stage data management cycle described at the beginning of this chapter, as well as the research questions. Each of the five stages is further broken down into sub-sections, to highlight emergent themes that occurred across the data collection methods.

Data System Key Findings & Recommendations

Overview of data collected for the Quality First strategies

Quality First implements multiple strategies to rate, provide TA and support professional development, and administer funding for quality improvement to participating programs. These strategies are employed on a specific timeline, which is dependent on programs' progress in the rating and TA process. Ongoing administration of Quality First provides support and structure to these individual strategies. Figure 5 illustrates the Quality First rating, TA, administration process, and data systems that will be addressed in this chapter. Note that there are other strategies and related activities being implemented as part of Quality First that are not included in this graphic or the following descriptions of data collection. These strategies were omitted because they are not part of the core model of Quality First and are tangential to answering the questions related to this portion of the evaluation.

Figure 5. The Quality First strategies discussed in this chapter, including the rating and improvement processes.



Planning: Development and implementation of data practices in **Quality First**

Planning is the initial stage in the data cycle, which entails identifying or refining the practices and processes that will be employed in implementation of the other stages. Activities that are common in this stage include determining how data will be collected and documenting those processes, having standardized data collection processes (i.e., who will collect and manage the data), ensuring data confidentiality, and preparing and training staff to do these activities in a high-quality way. In this section, we present the findings from the evaluation and offer recommendations related to each of these activities within the planning stage.

Research Question

• To what extent are standardized procedures used to collect data for each of the five Quality First program components, and the other First Things First strategies that support Quality First?

Documentation of data collection processes

Key Findings

Overall, key informants believe existing documentation describing data collection and management
is adequate however, one-third of key informants indicated that the existing documentation could
be improved. Suggestions included making the existing manuals easier to use and more clearly
written. Those who made this suggestion felt that sometimes the manuals can be too technical, or
are too long for staff to easily access the information they need. However, when probed, key
informants were unsure about the kinds of changes that could be made to improve documentation.

Recommendation

Develop short fact sheets about areas of key interest related to data practices. To address the issues presented in the findings above, First Things First might consider creating a series of short fact sheets about important data practices. These fact sheets would provide a brief overview of important expectations and processes related to observation, coaching, CCHC, and use of the Extranet data system. The fact sheets could also refer to the longer, more-detailed documentation resources for staff who are interested in learning more.

Standardization of data collection processes

Key Findings

- Quality First assessors who participated in the focus groups described with a high level of clarity about what data they are supposed to collect and how they are supposed to manage it once they have collected it.
- Observations conducted of coaching and CCHC staff reveal that standardized data collection and management procedures appear to be known and followed. However, since coaches provide TA that is responsive and tailored to the unique needs of programs, there is less regimentation around datarelated practices than is present for assessors, whose interactions with programs are much more prescribed.

Recommendation

Use the strengths of the Assessment strategy as a model for improvements to the coaching and CCHC strategies. In the focus groups with coaches and CCHCs, concerns were voiced that there is a lack of clear guidance about the types of information that they enter into the Extranet. Several key informants mentioned that there is an effort currently underway to add features to the Extranet that will allow coaches to select from predetermined categories, rather than having to enter data in narrative format only. Using predetermined categories has the dual benefits of providing some standardization to the data entered and saving coaches data entry time. However, there is value in continuing to collect and analyze narrative data, so it is not recommended that all text-based data be eliminated. Text-based information could be limited to that which is either necessary for rating or for coaching and CCHCs to do their jobs, or for overall quality improvement practices. Likewise, CCHCs were the one group of Quality First staff that voiced that they would like to collect and enter more data about their programs. They generally report liking the Extranet and feel it is an improvement over their old data system, (i.e., Care Facts) but they would be receptive to additional enhancements to the Extranet that would incorporate greater case management features.

The input about greater need for systemization was not of concern in the assessment strategy, which has a well-defined and understood process for collecting, managing, and entering data. Some of the strengths identified were: use of a limited and very specific number of data collection tools, close alignment between how data are collected on paper with how they are entered in the Extranet, clear guidelines about when data collected needs to be entered in the Extranet, and a defined process for supervisor review and reconciliation of Extranet. First Things First might consider using the known strengths in the assessment strategy and transferring them to the coaching and CCHC strategies. Since the data collection process for the assessment strategy is well-established, it offers a clear and replicable model for how data can be collected in the other strategies. And while there are some additional constraints on data process systemization in coaching and CCHC (e.g., both strategies are intended to meet the unique needs of the program) many of the successes in assessment can be tailored to provide greater regimentation in both strategies.

Privacy and confidentiality of data collection practices

Key Findings

- All key informants who were knowledgeable about confidentiality practices (primarily staff at First
 Things First, or a little over half of all respondents), reported that specific practices that meet
 information technology standards as outlined in the Best Practices to Ensuring Data Quality brief—
 such as using individual passwords to log into the Extranet and locking up hard copies of
 documentation—are in place to ensure that data are stored securely.
- The IT Lead noted that different levels of access based on user role (e.g., coach, coach supervisor, assessor, administrator) to the Extranet system helps to ensure privacy and confidentiality by only giving people access to the data they need to see to do their job.
- A few key informants also discussed the importance of protecting personally identifiable information (PII) during data collection, citing practices like: identifying participants by a unique identifier (ID) number, not using children's names in documentation, and only using teachers' first names on hard copies of documentation. There was some concern voiced in the focus groups that staff in the field, coaches most notably, will sometimes use both names and IDs on data collection forms. While the paper forms in use are formatted to not include both program name and ID, a few coaches in the focus group said they sometimes will write both the ID and participant name on the form for the sake of ease of entry.
- Observations of staff revealed a heavy reliance on paper forms to collect information. This was true
 for assessors, coaches, and CCHCs. Specialist supervisors who were interviewed, noted that this
 might also be the case with mental health consultants and inclusion specialists.

Recommendations

Create a data fact sheet to ensure that paper documentation does not include both names and IDs.

Overall, First Things First is doing well at keeping data private and confidential by ensuring that the Extranet data system meets industry standards. While coaches using both names and IDs on data collection forms does not appear to be a common practice, it is contrary to common data confidentiality.

collection forms does not appear to be a common practice, it is contrary to common data confidentiality standards. First Things First might consider using one of the fact sheets it creates as part of its documentation improvement to address this data confidentiality concern and reaffirm the importance of separating PII, like name and ID, on any paper forms.

Improve paper data collection procedures with an eye towards phasing-in the use of web-based data entry tools. Paper data collection is the main way in which Quality First field staff document their efforts with Quality First participants when they are out in the field. Paper data collection can be problematic because 1) it requires staff time to double-enter data and 2) double-entry increases the possibility of data entry errors. It is unlikely that paper documentation can be eliminated altogether, but there are opportunities to reduce the amount of paper used, and to phase in web-based data collection and reporting for some of the strategies. For example, if additional fields were added to the Extranet, this would allow TA providers to enter regular case management data directly into the Extranet, rather than having to transfer it from paper. The movement to a more web-based data entry system could also help reduce the amount of work for TA providers in retyping their narrative text responses.

Of the three Quality First strategies covered in this chapter, the assessment strategy appears to have the strongest data-related processes: staff are well trained in data collection, they are not collecting superfluous data, and they have a good understanding of why they are required to collect certain data and how it is used. Assessment would be an appropriate strategy to focus on for pilot testing of webbased collection methods, such as the use of tablets, in the field. Though costly, access to tablets and data entry forms for their observational assessments would 1) cut down on the amount of paper they need to use 2) improve data confidentiality, and 3) reduce the need for double-entry of data (i.e., onto paper then transferred to the Extranet).

Staff training on data processes

Findings

- Around three quarters of key informants across roles (e.g., assessment supervisors, coaching supervisors, Quality First staff) reported that, prior to beginning their employment at First Things First, they received data-related education, experience, and training through Master's level research or coursework. A few respondents stated that they received training from a previously-held position.
- Since their employment at First Things First, key informants reported receiving some additional
 data-related training or professional development, over and above the standard training all new
 employees receive. A little less than half received this training through webinars provided by First
 Things First and one third received training on the assessment tools. Another third reported
 receiving an initial one-on-one training from their supervisor, primarily on the use of the Extranet.
- In the focus groups, when asked about additional data-related training or professional development they would like to receive, assessors reported that they are very well-trained. However, they also agreed that they would like more training on writing assessment feedback reports, particularly for the CLASS, and that it would be beneficial to bring back the "lunch and learns." New assessors believed that, after initial certification, additional training about data collected during reliability visits would be helpful.
- Coaches and CCHCs who participated in the focus groups thought that the data training they
 received was adequate and that they were not in need of additional training.

Recommendation

Create regular training and peer learning opportunities for staff in each strategy. Most staff feel knowledgeable and well-prepared, through prior education and on-the-job training, to meet the data

collection and management expectations of their roles. Assessors suggested they would like the opportunity for additional regularly scheduled trainings on various topics related to their work, of which data practices could be one. They specifically mentioned that they liked the model of the "lunch and learns" that had existed previously and would be receptive to that training model being used again. This model would allow for external experts or speakers to be featured on topics related to their assessment work or could be used to facilitate peer learning among assessors. While coaches and CCHCs did not mention this kind of training, it could be a model for delivering on-going training that they are receptive too as well. Trainings will be effective if they include sessions on new topics and retraining to ensure fidelity to existing data collection procedures. New topics will give First Things First and regional staff a chance to roll out new procedures or cover material that is interesting to staff as a means of keeping them engaged in the importance of data. Covering existing procedures in trainings accounts for the reality that while staff may know what data procedures they should be using, over time implementation of these procedures is likely to slip.

Collection: Gathering the appropriate amount and type of data

In this section, we review the type and scope of data collected needed to implement Quality First and its strategies. In the data collection phase of the data cycle, the primary focus is collecting the data to fully meet the multiple goals —whether programmatic, reporting, improvement, or evaluation. Considerations such as the range of data collected, and how adequate those data are for meeting the needs of the program are important for this stage.

Research questions

- How do the data for each of the five Quality First program components—and the other First Things
 First strategies that support Quality First—support ongoing program management, and do they
 appear to be adequate to meet the initiative's needs?
- What new data elements, data collection mechanisms, or modifications, if any, are needed to address the goals of the subsequent phases of the Quality First Implementation and Validation Study?

Scope of data collected

Procedures and key findings

We compared the 182 data elements recommended by the *INQUIRE Data Toolkit* with data elements in the Quality First codebook (see Figure 6) to identify the extent to which: 1) there is a direct match between the two, 2) Quality First is collecting data elements not identified in the *INQUIRE Data Toolkit*, and 3) the *INQUIRE Data Toolkit* recommends data elements that Quality First is not currently collecting.

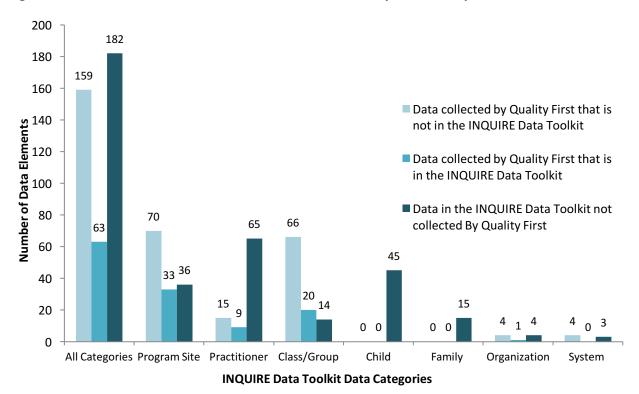


Figure 6: Crosswalk between INQUIRE Data Toolkit and Quality First Data System

- The INQUIRE Data Toolkit recommends collection of QRIS data from seven categories: 1) program site (e.g., funding, workplace conditions, quality improvement activities), 2) practitioner (e.g., demographics, education, professional development), 3) class/group (e.g., structure, curriculum, scores on quality measures), 4) child (e.g., demographics, disability, health), 5) family (e.g., identification, household information, parents' preferences), 6) organization (e.g., identification, program sites), and 7) system (e.g., QRIS operation, QRIS eligibility).
- Overall, 63 Quality First data elements match the INQUIRE Data Toolkit data elements across all 7 categories.
- Quality First collects an additional 159 data elements across all categories that are different or more
 Quality First-specific than elements in the INQUIRE Data Toolkit. These include many data elements
 specific to programs, like the size of the site and funding sources.
- The three *INQUIRE Data Toolkit* categories with the most overlap with Quality First data are class/group, program site, and, to a lesser extent, practitioner.
 - The class/group level has the highest match rate, with Quality First collecting 20 of the 34 INQUIRE Data Toolkit elements. Quality First collects an additional 66 class/group data elements, such as the highest number of children allowed in class and parent/teacher conference schedule, that are not in the INQUIRE Data Toolkit identified data elements.
 - In the program site category, 33 of the 69 elements overlap between the INQUIRE Data Toolkit and what is collected by Quality First.

- There is less overlap between the *INQUIRE Data Toolkit* and Quality First in the licensing/accreditation information and program management sections. Quality First does not store or collect information about licensing, like licensing revocations or suspensions.
- The Extranet, Quality First's data system, houses 70 additional program site data elements, some of which overlap with program administration data, such as staffing and benefits.
- While the INQUIRE Data Toolkit includes 74 practitioner data elements, only 9 of those elements overlap with what is being collected by Quality First. Quality First collects data about whether practitioners have a credential/license, but not more detailed information like the type or credential. Additionally, it does not have many employment details, like months worked per year, hourly wage, or the number of staff currently working in classrooms/groups. However, while these data were not present in the Quality First codebook used in this crosswalk, they may be in collected and maintained in other data systems such as Arizona's workforce registry.
- Quality First currently collects no child-level data. Such data are currently not necessary for program operations, but may become useful for future evaluations that examine child outcomes.

Recommendation

Consider collecting child and family data, and linking to practitioner data, to understand the impact of workforce on children in Quality First programs. Overall, there is some alignment between the data collected for Quality First and the common data elements recommended in the INQUIRE Data Toolkit. The greatest alignment is in the two categories that Quality First focuses its data collection efforts on as part of the implementation of the program: program site and class/group categories. Expanding data collection categories to children, families and practitioners, might be beneficial to Quality First if those data are useful in program implementation, monitoring, or evaluation purposes. It is also possible that some of the recommended data elements from the Toolkit are already being collected by other data systems such that these data do need to be added to the Extranet. If Quality First were to create linkages across data systems to where these data are already housed, this would allow access to additional data without increasing the data collection burden on staff. For example, linking with the workforce registry data would allow Quality First to access practitioner data currently housed outside of the Extranet.

Were Quality First to expand data collection to children, families, and practitioners, it might consider starting on a small-scale with information about their demographics and location. This information would help them to identify where individuals served by and working within Quality First are located within their communities. This information could be used to identify areas where access to Quality First might be limited.

Staff perceptions of data collected

Key findings

- When surveyed about their perceptions of adequateness of the amount of data they are collecting, half of all implementation survey respondents (i.e., First Things First staff, coach supervisors, assessor supervisors, CCHC supervisors) reported that felt they collect the right amount of data (see Table 33). A little less than half (45%) think too much is collected, while the remaining few (5%) too little is collected.
- Coaches

- Less than half of coaches agreed with the statement that "they collect the right amount of data".
- Forty percent of coaches who responded to the survey reported that "a little more data are collected than is necessary".
- The survey findings revealed that, of the coaches who reported "too much data" are collected, around half believe that some data that are collected are redundant and unnecessary. These respondents, as well as coaches in the focus group, mentioned that data captured in the coaching logs are already documented in other places, making collection of these data duplicative.

Assessors

- Most assessors reported that they "collect the right amount of data."
- Of assessors who said that too much data are collected, the mostly commonly mentioned type of data was Quality First Points Scale (QFPS). This finding was echoed in the assessor focus group. Assessors concerned with the QFPS thought that they are required to collect unnecessary data for the QFPS that are not used in the rating process.
- A few assessors in the focus group also mentioned that while some of the data in the QFPS are unnecessary to collect, there are some alternative QFPS data they think would be more useful to collect instead. Specifically, they mentioned that it might be helpful to collect more detailed information for the QFPS about the extent to which participants implement their documented plan (e.g., activity plans, retention plans) because it is their perception that some participants have plans that they submit for the QFPS that they do not use in practice.

CCHCs

Slightly fewer than half of CCHCs reported that they think they do not collect enough data.
 They would like to collect more domains for their charting (i.e., tracking of their work that mirrors typical health clinic or service documentation), as that enhancement would bring their reporting more in line with typical nursing documentation.

Supervisors

- Around one third of TA supervisors report that their staff collects "the right amount of data", a quarter "a little less data than necessary", while slightly less than half say "a little more data than necessary" or "too much data" are collected (see Table 34).
- O Supervisors' impressions of the appropriateness of the amount of data collected mirror those of direct support staff. More than half of surveyed coaching supervisors felt like their supervisees are required to collect too much data. All CCHC supervisors survey respondents said that a little less data than necessary are collected by their supervisees. Around three-quarters of assessor supervisors reported that their staff collects the right amount of data.

Table 33: Perceptions of the amount of data staff are expected to collect					
	All Respondents	Assessor	сснс	Coach	
	(n = 113)	(n = 30)	(n = 16)	(n = 67)	
Too much data	11%	7%	0%	15%	
A little more data than are necessary	34%	30%	13%	40%	
The right amount of data	50%	60%	75%	40%	
A little less data than are necessary	4%	3%	13%	3%	
Not enough data	1%	0%	0%	1%	

Source: Child Trends survey and interview data, 2016

Table 34: Supervisor's perceptions about the amount of data their staff collect					
	All	Assessor	ССНС	Coaching	
	Supervisors	Supervisor	Supervisor	Supervisor	
	(n = 20)	(n = 5)	(n = 4)	(n = 11)	
Too much data	20%	0%	0%	36%	
A little more data than are necessary	20%	20%	0%	27%	
The right amount of data	35%	80%	0%	27%	
A little less data than are necessary	25%	0%	100%	9%	
Not enough data	0%	0%	0%	0%	

Source: Child Trends survey and interview data, 2016

Recommendation

Consider revising the data elements collected to pare down fields that are not used or are duplicative. Add fields in areas where not enough data collection is taking place. Initial findings from this evaluation revealed that coaches, and to a lesser extent CCHCs, report that they feel they are collecting either too much or too little data. It is not clear specifically what data they are collecting that they think they are collecting "too much" of and what data they would like to be collecting of which they are currently not collecting enough. It is also unclear whether the issue is not related specifically to the amount of data collected, but rather the way in which it is reported within the Extranet. One example, for CCHCs of data they would like to be collecting is more detailed information that is similar to the medical charting software they used to use. It is unclear whether this information is necessary for Quality First, but CCHCs feel it is useful documentation for them in their work with programs. Coaches report that the data they would like to collect that they currently do not includes: a list of program changes that have occurred over the last assessment cycle (e.g., new director, change in location, staff turnover) and an option to indicate whether a TA activity they engaged in was in response to a program request or an assessment they completed.

Adequacy of data to support evaluation

Key findings

- No data are being collected about the children and families being served by programs participating
 in Quality First. Therefore, there are no data elements currently being collected that could be used
 to support an evaluation of Quality First that includes child outcomes.
- There is a wealth of information currently available about programs and their classrooms that can be used by First Things First to complete internal evaluations and monitor the Quality First

strategies. Program and classroom data that are collected for Quality First implementation include data elements focused on the rating and quality improvement process. These data could be beneficial to an evaluation that examines how classroom or program characteristics factor into child outcomes.

• In the key informant interviews, a concern was voiced by First Things First staff that while there is an abundance of administrative data about programs and classrooms, there is a lack of capacity to analyze these data on a regular basis to support on-going evaluation efforts. A couple of interviewees who are staff at First Things First noted that having a data analyst on staff would be necessary for First Things First to take advantage of all the data that are collected through Quality First.

Recommendations

Develop a plan for collecting child and family data that will support further validation of the Quality First rating criteria and process. In future phases of work, First Things First plans to include measures of children's development in a validation study of Quality First. While this effort may be conducted by an external vendor contracted by First Things First, it is helpful to review the data elements that can support a study that includes children's development. For example, it is important to have unique identifiers for classrooms and teachers that can be linked to the data collected for children in the classrooms. Other child level data, such as child demographics and information on those receiving family support or special education services, may also be beneficial to have available. As planning for next study phases proceeds, First Things First should develop a plan that outlines the types of data and specific data elements they anticipate will be necessary for a study involving child outcomes. Such a plan will provide an external vendor with an initial sense of the scope and content of child and family data collection. First Things First could use the data matrix provided as part of this evaluation to develop this initial plan which can then be refined an added to by the vendor conducting the evaluation.

Processing: Ensuring data quality

The data processing phase includes practices regarding inputting data at the rawest level possible, and avoiding overwriting historical data. Data quality practices also entail ensuring that the data entered into a database, like the Quality First Extranet, are a true reflection of the data that were collected in the field—that is, that data entry errors are minimized. Minimization of data entry errors includes both technological (i.e., programming to enforce data entry rules) and human (e.g., training of staff about data entry and quality procedures) practices.

Research question

• What are the quality control procedures used to collect the data for each of the five Quality First program components?

Quality control of data collected

Key findings

• Interviews with the IT Lead and Data Warehouse Manager suggest that the Extranet utilizes typical database management techniques to enforce data entry rules about who (i.e., which staff) can enter what (i.e., which data) and how (i.e., which level of access).

- Interviewed key informants stated that they believe there are a variety of checks in place to ensure
 data collected for Quality First are of high quality. Half of respondents, primarily the supervisors of
 assessors, CCHCs, and coaches, said they personally double-check data entered into the Extranet
 (First Things First staff did not respond that they do this kind of double-checking, but that task is not
 part of their expected responsibilities). This finding was echoed by comments made by the focus
 group participants who stated that they double-check entries they make to the Extranet.
- One-third of interviewees, primarily First Things First staff, cited quarterly Extranet reviews as an activity to ensure data are collected and entered in a standardized way.
- One-third of interviewees said there are manuals that outline data entry and data quality procedures.
- Coaches who participated in the focus groups indicated that they enter information into the Extranet with minimal oversight from supervisors monitoring whether the data are entered correctly. One specific concern that arose in the coaching focus group is that the hours of coaching time entered into the Extranet are not the actual hours coaches are working with participants. In the focus group, coaches noted that they often spend more time with programs than their allotted monthly hours, but that they only record the maximum hours into the Extranet that are allowed by the coaching model.⁵⁵

Recommendation

Review and revise the process for coaches to enter their TA hours. Strong technical (via the Extranet) and human resource-based (through supervisors) processes are in place to ensure data collected for Quality First are of high-quality. The one exception to this is the way in which coaches enter the hours they spend working with programs. Based on coaches' remarks from the focus groups, they often let program expectations about number of hours in the model dictate the hours they enter into the Extranet, regardless of whether or not those hours were a true reflection of their actual time spent. Most often, they are providing more hours than they are entering. As a next step, First Things First should clarify why and how they need these data. Is it for performance improvement, program improvement, or some other reasons? The primary goal of collecting this information should inform the message to coaches about the importance of entering the data collecting. Coaches may be entering hours based on an assumption that the goal is performance improvement and that entering the "right" number of hours avoids punitive action. If First Things First plans to use these data for program improvement, staff should communicate this goal to coaches so that they understand that entering the actual number of hours is used to make improvements to Quality First as a system as the primary goal, rather than as a staff monitoring tool.

Provide on-training and develop a fact sheet around data quality processes. Quality First staff are knowledgeable about data quality practices, but the implementation of them sometimes slips over time. This provides an opportunity for reinforcement of important practices like double-checking data by both staff and supervisors, reviewing manuals on a yearly basis, and ensuring that data entered into the Extranet is a good reflection of what actually occurred. There is nothing to suggest that Quality First staff are knowingly not following data quality procedures, rather they are adapting to time and programmatic

⁵⁵ Please refer to the Goal One: System Design Evaluation chapter for more information on how coaches are deviating from their required number of intensity hours.

burdens. Regular retraining about the importance of data quality will help reaffirm rigor in these practices among staff.

Management: Effectiveness of the data system

In this section, we discuss the effectiveness of the technology used to support the implementation of Quality First. According to *Best Practices for Ensuring Data Quality* brief, one of the key practices is making data knowledge institutional rather than person-centric, meaning that no one person or small group of people is responsible for collecting, managing, and using data. In addition, this phase stresses the importance of maintaining up-to-date and detailed documentation and ensuring that the data system is functional and easy to use.

Research questions

- What improvements can be made to the design of the Quality First database system to capture, store, and report Quality First data elements and to refine data management practices?
- What data system changes are needed to ensure that data collection and data reporting are sufficient for on-going program management and quality improvement of Quality First?

Functionality and ease of use of the extranet

Key findings

- Almost all survey respondents reported using the Extranet data system more than once a week, while over half of all respondents reporting using the data system daily.
- Survey respondents report their top uses of the Extranet were for: 1) entering data about a program's TA activities, 2) completing on-going case management activities/tasks, and 3) entering data about program's observational assessment (see Table 35).
- Survey respondents were asked to rate the Extranet's effectiveness in supporting certain types of
 data-related activities like data collection, entry, and management. Over half of all survey
 respondents reported the data system as being effective or very effective in supporting all specified
 activities. Document review, data collection, and data entry were among the highest-rated activities
 that the Extranet effectively supports.
- Assessors rated the effectiveness of the Extranet higher than coaches or CCHCS, across all datarelated activities. Assessors reported perceiving that the Extranet is best in supporting data collection, data entry, and report writing activities.
- Coaches' perceptions of the data system's ability to support quality improvement tasks were similar
 across all quality-improvement activities, but they tended to rate the Extranet as less effective at
 supporting data collection than assessors. Just over half of the coaches viewed the document review
 as being effective or very effective compared to three-quarters of assessors.
- CCHCs generally rated the Extranet lower in effectiveness than coaches and assessors. Although over half of CCHCs ranked the data system as effectively supporting uploading files, only one-third viewed it as supporting data management, and less than a third saw the system as supporting data review and analysis.

- When asked about improvements to the Extranet, the most common improvement—mentioned by
 one fifth of survey respondents—was that they would like to see a reduction in the amount of
 narrative data with more standardized, checklist-type of data elements.
- Coaches would like to fields added to the Extranet to capture the reasons for which they provided additional intensity hours, program changes that have occurred since the last assessment, activities they conducted based on programs' needs, and a way to designate which activities they conducted specifically because that support was requested by the program. For both the program changes and program need fields, coaches would like an option to indicate that staff turnover or onboarding was a primary reason they engaged in certain activities.
- Participants in all three focus groups mentioned that the Extranet is often very slow and that there
 are times when the site gets such heavy use that it becomes difficult to access at all. CCHCs dislike
 the Extranet's pagination, and that it maxes out at 50 participants per page, and they would like to
 be able to view all the Quality First participants they are working with on one page. Assessors would
 like to see improvements to uploading documents, and coaches noted that they would like more
 standardization to their Extranet data fields.
- Staff in all the focus groups also talked about the need for Extranet improvements for Quality First participants as well. Focus group members felt that the Extranet was not easy for participants to navigate, and that they would benefit from access to trainings or tutorials about how to use the Extranet. They mentioned that participants have difficulty accessing the Extranet, because it requires an internet connection, which some of them lack.

Table 35: Staff perceptions of the Extranet's effectiveness in supporting data-related tasks					
	All Respondents	Assessors	CCHC	Coaches	
	(n=110)	(n=28)	(n=16)	(n=66)	
Data collection	62%	93%	44%	53%	
Data entry	59%	89%	50%	48%	
Data management	52%	75%	38%	49%	
Data review/analysis	53%	75%	31%	49%	
Document review	64%	79%	44%	62%	
Report writing	55%	82%	47%	46%	
Collecting information on programs	59%	79%	50%	54%	
Uploading files	59%	71%	56%	54%	

Source: Child Trends survey and interview data, 2016

Recommendation

First Things First should consider conducting a usability study to identify specific areas of the Extranet that may lack ease of functionality. Usability testing is a specific field of research and study that examines the ways in which users interact with a website to identify components of the design of the site that inhibit navigation and extend use times. This kind of study would be the most appropriate method for addressing some of the specific concerns that field staff have in using the site and whether they are barriers that can be easily addressed to improve functionality of the Extranet for users. The primary benefit of improvements to usability is that they will reduce the amount of time that staff spend on data entry, time which can then be used to directly work with Quality First programs.

Distribution: Use of data to support Continuous Quality Improvement

Data distribution entails taking the data that has been collected and processed and providing it back to data users (e.g., First Things First staff, Quality First TA providers, policymakers, the public) to use in their work. To distribute data, first it is important to understand what stakeholders, like participants and staff, understand about the purposes for which data are used.

Research Question

• How do the data for each of the five Quality First program components and the other First Things First strategies that support Quality First promote continuous quality improvement of Quality First?

Stakeholder knowledge about data

Key findings

- Almost all key informants believed that the TA staff (i.e., assessors, coaches, CCHCs) understand
 what data are being collected and why. One-fifth indicated that the staff does not understand why
 certain data are collected or important, while one-quarter of interviewees reported that the staff's
 understanding has improved with time.
- Assessors report that they have a good understanding of why they collect data and understand how
 the assessment data they collect directly impacts programs' ratings and quality improvement
 supports.
- CCHCs in the focus group, while unsure if they were capturing all the data that are most relevant to their job, did report understanding how the data they collect impacts their own work, as well as the administration of the CCHC strategy and Quality First as a whole.
- Coaches in the focus group report that they generally understand why they are required to collect data, and they have a good understanding of how data factors into their day-to-day interactions with programs. They seem to have a clear understanding of how they use the data they collect about programs (e.g., planning tools, observation forms) to assist them with ongoing case management.
- Coaches report having a more limited understanding about how the data they enter into the
 Extranet gets used. Coaches in the focus group questioned whether, and how, First Things First staff
 use these data that coaches enter into the Extranet, and if these data are analyzed to improve upon
 the Quality First coaching process. Coaches would like to have a better understanding of how their
 Extranet data gets used, and whether it is used by First Things First staff to make changes to the
 coaching model.
- In all three focus groups, Quality First assessors, coaches, and CCHCs reported that they do not think Quality First participants have a good understanding of how the data about their program are collected and used. This sentiment was echoed in the interviews, with over half of key informants believing that Quality First participants do not understand the reasons why they report data about their programs, or why data is collected about their programs.
- Focus group participants (i.e., coaches, assessors and CCHCs) also noted that Quality First participants are unclear about when they need to update information in the Extranet, and do not

have a clear sense of how the updated data (e.g., teacher information, classroom sizes) directly impacts their assessment and eventual rating. Assessors in particular noted that even participants at the highest star levels (i.e., 3-star and above) lack an understanding of how their data are used. Furthermore, they reported that the amount of data collected can be more confusing to them than for 1- and 2-star participants because they are required to provide more extensive amounts of data.

On the other hand, one fifth of key informants indicated that Quality First participants do fully
understand the purpose of collecting assessment data. In the assessor focus group, it was suggested
that this is because the results of the assessments are so clearly tied to rating and quality
improvement funding, making it of high importance to Quality First participants.

Recommendation

Review expectations and enhance communication with Quality First staff about the importance of data collection and how data can be used to enhance their work. Some Quality First staff have a good understanding of why they are required to collect certain data. This is especially true for assessors, whose data collection responsibilities are very prescribed, and who have the highest connection between the data they collect and they data they enter into the Extranet. CCHCs also have a good understanding of why they are required to collect certain data, but they are receptive to additional opportunities to collect more data elements to help them in their job. However, coaches are less sure about why they are expected to enter data into the Extranet. Some coaches reported that they do not have a good understanding of who uses that data, how they use it, and what purpose it is intended to meet.

Quality First could develop a clear statement that they use consistently in communications with staff that explains the organization's strategy for why certain data are collected, how they contribute to the organizational mission, and the ways in which those data inform program improvements. Additionally, Quality First staff may benefit from additional training about why they are required to collect and enter the data. Trainings could help clarify how the information they collect supports the rating process, assists with their case management, and how it is a foundational set of information to improve the Quality First system. Making these direct connections through additional training may help to ensure that the data entered into the Extranet are an accurate reflection of the work Quality First staff are doing in the field. This is most notable when it comes to coaching hours, and questions about the veracity of the data they enter into the Extranet regarding their time with programs. A better understanding of how these data are used by First Things First staff overseeing the Quality First coaching strategy might result in more accurate data about hours being entered into the Extranet.

Provide additional communication and professional development/training for Quality First participants explaining the connection between data collected and eventual rating, and provide additional supports to participants to use the Extranet. In both the focus groups and the key informant interviews, most Quality First staff felt that Quality First participants did not have a good sense of why they had to report and update certain data (e.g., the number of children in each classroom) in the Extranet. Staff also felt that Quality First participants did not fully understand that the information collected about their programs by coaches, assessors, and CCHCs directly factors into their rating and the quality improvement supports that are made available to them. Participants also appear to struggle with accessing the Extranet itself, either because they lack a reliable internet connection or because they find the interface confusing.

These two issues (i.e., lack of understanding of how data are used, impeded ease of use of the Extranet) mean that Quality First participants may only go into the Extranet to update their information when prompted or assisted by Quality First staff. Therefore, it is likely that much of the data the programs are required to report in the Extranet is out of date. Strengthening the connection for participants that the data they report on the Extranet directly impacts the provision of their TA, and possibly their rating, might compel participants to update this information more often. This is especially true if added improvements to the Extranet are made to improve its ease of use for Quality First participants. These improvements could be to the data system itself, or by giving coaches additional time to assist participants in entering their data. Enhancing communication through the coaches and/or providing professional development and training opportunities are two strategies for helping clarify how data are used for Quality First participants.

Data use for setting goals and reporting

Key findings

- All of the TA supervisors (i.e., those who supervise the coaches, assessors and CCHCs) who participated in the key informant interviews reported using data from the Extranet to monitor the efforts of their staff, while a few reported also using data from external sources (e.g., Department of Health Services) to meet additional data needs for goal-setting.
- Key informants who work in the administration of Quality First felt strongly that data are used
 routinely to make decisions about the direction of the program. Examples they provided of using
 data to make decisions include: using data to identify which participants to target resources to; the
 impact of quality improvement supports on participants' progression and regression through the
 levels of quality; monitoring the caseloads of assessors, coaches, and CCHCs; and determining an
 appropriate length of time between assessment cycles.
- Other Quality First administration staff who were interviewed talked about the process in place for
 using data to set long-term goals, and to report about the progress of the program to external
 stakeholders like state policymakers and federal funding agencies. They believe this process works
 well. Administration staff who participated in the interview did not have any suggestions for how to
 improve this process.

Recommendations

Invest in additional data analysis capacity to utilize data already collected. There is a wealth of administrative data being collected about programs and the quality improvement and rating processes that are not being used to its full extent due to a lack of data analysis capacity. Investment in additional data analysis by hiring additional staff or reassigning current staff, would allow First Things First to utilize data to a greater extent to support ongoing internal evaluation. Coordination of the assessment, CCHC, and coaching strategies would be improved with access to more detailed and timely information about the effectiveness of implementation of these strategies within each agency and down to the level of individual staff.

Summary and limitations

There were some limitations to the methodological approach used to complete this evaluation. The data about the overall administration of Quality First was collected solely through key informant

interviews. This is because administration staff are in different roles, with different responsibilities, and therefore creating a uniform survey for all staff would have been an unsuitable method of data collection. However, because the number of administration and supervisory staff is small, the number of key informant interviews were limited. Some of the interviewees serve in unique roles that make their opinions incomparable to other staff. With that, it is important to keep in mind that the purpose of this goal was to uncover data-related issues for First Things First to address, rather than to serve as an evaluation of current practices separate from future goals.

The focus group, and observational data were also collected from limited samples of possible participants. Completing more interviews, focus groups, and observations would have provided additional information about data use in Quality First. However, since the research questions for this evaluation are descriptive, the totality of the methods used provided a well-rounded picture of data practices in Quality First that can be utilized to inform recommendations for refinements to the data system.

This evaluation of the Quality First system design examined the data practices and technologies in place to support the implementation of Quality First. This evaluation was broadly-based rather than in-depth on a small number of topics. It addressed findings and provided recommendations about standardization of data collection processes, confidentiality and privacy practices, staff preparedness to handle data, sufficiency of data collected, staff assessments about the adequacy of data collected, how data can be used to support future Quality First evaluations, quality control procedures, functionality of the data system, and how data are used to meet programmatic goals.

To gather detailed assessments of any of these areas, future assessments of Quality First's data practices may be best administered with a limited scope focused narrowly on one or two areas. This would allow First Things First to gather very specific information with the intent that it will be used to make improvements, rather than to serve as an evaluation of the system.

Chapter 3: Validation of the Quality First Rating Scale

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Overview

The purpose of this component was to conduct a validation study of the Quality First rating scale by collecting and analyzing data, to help First Things First continue to refine and strengthen its QIRS. This chapter examined how Quality First quality elements are measured, how they fit together to form a rating, and whether the rating is functioning as expected. It also examined whether ratings in the current framework meaningfully differentiate higher quality ECE programs from lower quality programs, and how ratings and observed quality vary across different program types.

Quality First includes a rating scale made up of multiple quality elements used to create a program rating that ranges from 1 to 5 stars, with more stars indicating higher quality. We use the term *quality elements* to describe the assessments that make up the Quality First Rating scale, which include the Environment Rating Scales (ERS), the Classroom Assessment Scoring System (CLASS) as well as the Quality First Points Scale (QFPS), which includes standards for Staff Qualifications, Administrative Practices, and Curriculum and Assessment. Quality First programs are initially rated using the ERS unless they are a nationally accredited or Head Start program. If a program scores a 3.0 or higher on the ERS (needed to attain a 3-star or higher rating), then the program is assessed using the CLASS and the QFPS. If programs score lower than a 3.0 on the ERS, then they are rated as a 1- or 2-star. Programs meeting the ERS threshold must also score a minimum number of points in each domain of the CLASS (Emotional Support= 4.5, Classroom Organization= 4.5, Instructional Support= 2.0). Once those cutoff scores are met, programs are assessed on the QFPS, and must score at least two points on each of the QFPS domains (Staff Qualifications, Administrative Practices, and Curriculum and Assessment).

This validation study was designed to address three main research questions:

- 1. How does the distribution of Quality First star levels vary by program type?
- 2. What are the relations among the quality elements in the Quality First rating scale? Are there some elements that are more challenging than others for programs?
- 3. To what extent is the Quality First rating scale assessing program quality in expected ways? That is, are the star ratings related systematically to other measures of quality?

Study design and procedures

This study included all Quality First participants that were currently enrolled and had a verified rating in the spring of 2017 (922 programs, 774 child care centers, 148 family child care homes). In a subset of 205 Quality First programs, additional observational data were collected by the Child Trends team using the Early Childhood Environment Rating Scale-3 (ECERS-3) and CLASS. CLASS data were collected in 1-and 2-star programs because Quality First conducts the CLASS only in 3-, 4-, and 5-star programs. The ECERS-3 was used as an independent measure of program quality, as this tool is not part of the Quality First rating scale.

Quality First administrative data were analyzed to supplement the observational and survey data. This included star ratings and individual assessment data (ERS, CLASS, QFPS) from all currently enrolled Quality First participants. In addition, directors and teachers completed surveys to gather information about their demographic characteristics, their programs and practices, and their experiences in Quality First. The surveys also were intended to gather descriptive information about 1- and 2-star programs that would otherwise be missing because First Things First does not complete the QFPS on lower star level programs.

Summary of Findings

Nearly all (94%) of Quality First programs were rated between 2- and 4-stars, with few programs being rated at the 1- or 5-star levels. The distributions were similar for different types of programs (i.e., center-based, family child care, rural, urban, and tribal programs).

The quality elements that are part of the Quality First rating scale were associated with one another in expected ways, and contributing to an overall picture of quality in programs. When examining the various quality elements (i.e., the seven domains that make up the three assessment tools: ERS, CLASS and QFPS), Quality First programs scored higher on the CLASS Emotional Support and Classroom Organization elements than on Instructional Support, which is a common pattern seen across most studies that use the CLASS. Additionally, on the QFPS, programs received more points on Administrative Practices, compared to Staff Qualifications and Curriculum and Assessment. Furthermore, statistical analyses indicated that the quality elements were measuring similar aspects of quality, yet without the tools overlapping or duplicating each other.

Higher star rating levels were generally associated with higher scores on the various quality elements, with patterns generally holding for both family child care and center-based programs.

- Significant differences were found between low (1- and 2-star), medium (3-star), and high (4and 5-star) star rating levels for the ERS, indicating that higher star rating levels were associated with higher ERS mean scores. The pattern held for both family child care and center-based programs.
- This study found differences in CLASS scores by star rating level for Quality First programs, as programs with higher star ratings scored significantly higher in the CLASS Emotional Support (ES) and Classroom Organization (CO) domains. Small, unexpected differences were noted for the CLASS Instructional Support (IS) domain. High star level programs scored significantly higher than medium and low star level programs as predicted, but programs with a medium star rating level were significantly lower on IS than low star level programs. However, CLASS data for low star level programs were collected by Child Trends and CLASS data for medium and high star level programs were collected by First Things First. Thus, these findings must be interpreted with caution, as they could be explained by different data collection teams, different times of year, or the lower star level programs being observed after receiving Quality First supports.
- In general, all three groups (low, medium, and high star levels) were significantly different from
 one another on QFPS scores. Significant differences among the three groups were found in
 center-based programs. However, among family child care programs, while significant
 differences were found between the low and medium to high groups' QFPS scores, QFPS scores
 between the medium and high groups' QFPS did not significantly differ.

Lower rated Quality First programs (1- and 2-star) may be able to meet some of the QFPS requirements for higher star levels (3-, 4-, and 5-star). Using director and survey data from 1- and 2-star programs, we explored how these programs might meet specific requirements and criteria on the QFPS.

- Most 1- and 2-star survey respondents reported meeting the QFPS requirements at the 3- and 4star levels for years of experience (Staff Qualifications) and ratios (Administrative Practices).
- One third to half of the 1- and 2-star survey respondents met the 3- and 4-star QFPS
 requirements for educational attainment (Staff Qualifications), staff retention (Administrative
 Practices), and assessment processes (Curriculum and Assessment).

• There was evidence that most survey respondents met the 5-star level requirements for Curriculum and Assessment, and about half might be able to meet the 5-star requirements on staff retention (Administrative Practices).

These findings indicate that there may be some QFPS components that are already being met by many Quality First programs, regardless of star level. These results should be interpreted with caution, as data were analyzed only for those who chose to respond to the surveys, and therefore we cannot directly compare the survey data to the QFPS. However, these findings may help First Things First better understand what requirements and quality elements lower star level programs are likely to meet.

The CLASS and QFPS scoring criteria appear to be challenging for 2-star programs to meet, while the ERS and CLASS scoring criteria appear to be challenging for 3- and 4-star programs to meet. This study examined whether there were some quality elements in the Quality First rating scale that were more challenging for programs to meet based on the scoring criteria, thus preventing them from achieving a higher star rating.

- For 2-star programs, the scoring criteria requirements for the ERS and the QFPS Staff
 Qualifications and Curriculum and Assessment elements at the 3-star level appear to be
 challenging for programs to meet.
- The ERS and the CLASS IS scoring criteria at the 4-star level were challenging for a large portion of 3-star programs. The QFPS total points requirement at the 4-star level was also difficult for many programs to meet, although no one element of the QFPS proved more difficult than others. Similar trends were found for 4-star programs in reaching the 5-star level.

The Quality First rating scale is differentiating between levels of observed quality. To evaluate if the Quality First rating scale is differentiating between levels of observed quality, Child Trends used the ECERS-3, which is not part of the Quality First rating scale, as an independent measure of quality. Overall, higher ECERS-3 scores were observed in programs with higher star rating levels. ECERS-3 scores were significantly higher in high rated programs (4- and 5-star) than in medium (3-star) and low (1- and 2-star) rated programs. However, there was no significant difference between low and medium star rated programs.

Quality First programs tend to increase in their ratings over time, with many moving up to quality levels, as defined by Arizona. To examine how programs' ratings are changing between rating cycles, we analyzed ratings data from the current and previous rating cycles. In general, a little over half of all programs increased in their star ratings, mostly by one star rating level. Arizona defines *quality* programs as those who are rated at 3 or more stars. The majority of programs that moved up increased from approaching quality levels (1- and 2-star), to quality levels (3-, 4-, and 5-star), indicating that they are making the necessary improvements needed to achieve *quality*, as defined by the State.

Overall, findings from this study are consistent with other recent validation studies, which all reported significant relations between ratings and an independent measure of program quality. The Quality First rating scale is working to differentiate quality, particularly between the medium (3-star) and higher star levels (4- and 5-star). It appears that 2-, 3- and 4-star programs face challenges in achieving higher CLASS ratings, while 2-star programs have difficulty with the QFPS and 3- and 4-star programs struggle to achieve higher ratings on the ERS. Lower star rated (1- and 2-star) programs have strengths that are not recognized by the current rating tool and may be able to meet requirements for higher star level programs.

Quality First star rating process

Quality First is Arizona's voluntary QIRS that assigns star ratings to participating, licensed center-based and family child care programs. Across the country, QRIS use three types of structures for their rating process: block, point, and hybrid. In a block structure, used by 48% of QRIS, programs need to meet all criteria at each level to be awarded that star rating. In comparison, a point structure, used by 15% of QRIS, is one in which programs earn points for meeting certain criteria, and points are summed to determine a rating. A hybrid structure uses both blocks and points to determine the star levels. Thirty-eight percent of QRIS, including Quality First, use a hybrid structure (QRIS Compendium, 2016). In Arizona's hybrid structure, possible star ratings range from 1 to 5 stars. Programs must achieve a specific number of points on each of the individual criteria within each star level to be awarded a rating at that level. For example, to earn a 3-star rating, programs must meet certain thresholds on three assessment tools, which are described below.

Quality First ratings are based on assessments from three tools:

- Environment Rating Scales (ERS) are used to assess components of a program's learning environment—such as arrangement of indoor and outdoor space, materials and activities, and use of language—on a 1 to 7 scale. There are three ERS used in Quality First: the Early Childhood Environment Rating Scale-Revised (ECERS-R), which is used in center-based preschool-aged classrooms; the Infant-Toddler Environment Rating Scale-Revised (ITERS-R), which is used in center-based infant and toddler classrooms; and the Family Child Care Environment Rating Scale (FCCERS-R), which is used in family child care programs.
- Classroom Assessment Scoring Systems™ (CLASS™) examines the quality of the interaction between teachers and children in three domains: emotional support, classroom organization, and instructional support. Quality First uses the CLASS Pre-K in classrooms with 3- through 5-year-olds and the CLASS Toddler in toddler-age classrooms.
- Quality First Points Scale (QFPS) assesses three additional components of quality: Staff
 Qualifications, Administrative Practices, and Curriculum and Child Assessment. For each of these
 domains, programs can receive up to six points on a 0 to 6 scale.

Programs are initially assessed using the ERS, and, if they score a 3.0 or higher, they are then assessed using the CLASS and the QFPS. For center-based programs serving preschoolers and infants/toddlers, ERS scores are calculated taking an average of the ECERS-R and ITERS-R classroom scores. If programs score lower than a 3.0 on the ERS, they are rated either a 1- or 2-star, depending on the ERS average score. If they score a 3.0 or above on ERS, the CLASS and QRPS scores are used to determine their final rating. Table 36 shows how these three instruments are combined to assign a star rating at each of the five levels.

Table 36. Quality First Process for Determining Star Ratings



Source: First Things First, 2017

Some Quality First programs, however, are exempt from this typical rating process. For instance, Head Start and nationally accredited programs that enter Quality First are first assessed using the CLASS and, if they meet all CLASS thresholds to be rated at a 3-star level, they are then administered the QFPS. If a program does not meet the CLASS thresholds for a 3-star rating, they are assessed using the ERS and receive a 1- or 2-star rating, depending on their ERS score.

Star levels of all Quality First participants

During the spring of 2016 when Child Trends began recruiting Quality First programs into the validation study, there were 789 child care centers and 173 family child care homes participating in the system, for a total of 962 Quality First participants. Of these 962 participants, 31 were pending verification, which means their star rating had not yet been assigned. The star levels for the remaining 931 participating programs from which the recruitment sample was drawn are presented in Figure 7.

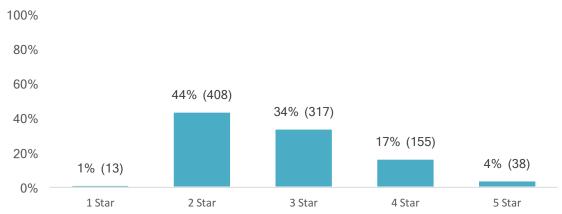


Figure 7. Star levels of all Quality First participants (N=931)

Source: Quality First administrative data, 2016

What is QRIS validation?

Though QRIS across the nation share common elements, the specific details of the rating criteria and process vary across systems and reflect the perspectives of unique stakeholders and the state context within which each QRIS was created. To date, there is no prescribed or recommended QRIS structure; each system is developed individually, building on what other QRIS have done and in some cases introducing new rating criteria and processes. The concept of validation was introduced early in the evolution of QRIS to serve as a "check" on the ability of the rating tool to distinguish program quality (see Karoly, 2014 for a review of results). Validation was formalized further when it was added as a requirement for Race to the Top – Early Learning Challenge state grantees. QRIS validation has been defined as "a multi-step process that assesses the degree to which design decisions about program quality standards and measurement strategies are resulting in accurate and meaningful ratings" (Zellman & Fiene, 2012; p. 1). QRIS validation is not intended to be a single analysis, but rather a series of analytic activities that support the continuous improvement of the rating criteria and process.

Four interrelated activities are used in QRIS validation (Zellman & Fiene, 2012):

- Examining the quality standards and indicators included in a QRIS to ensure that they reflect key aspects of quality,
- Examining the strategies used to measure each quality standard in the QRIS,
- 3. Determining the extent to which the overall program ratings accurately reflect differences in quality, and
- 4. Determining the extent to which the program ratings are associated with measures of children's social-emotional and pre-academic skills (indicating that the ratings are tapping the elements of quality that are meaningful for supporting children's development).

Typically, states address different aspects of validation at different times in the development of a QRIS. Each of the four activities is described briefly below and tied to the Quality First evaluation.

Examining key concepts in the QRIS. The first activity addresses whether the QRIS includes standards and criteria that are important elements of quality, and that are related to children's growth and development. This aspect of validation is typically done during the development and design phase of a QRIS and may be examined again to support revisions or a redesign. In Arizona, Goal 1 of the current

evaluation provided an outside perspective on this step of the validation phase and pointed to directions for further refinement to the system. Results from the first goal can be found in chapter one of this report.

Measurement strategies. This validation activity examines the strategies used to measure the quality standards and assesses whether they are rigorous and working as intended. Because program ratings are based on the information gathered for each standard, it is important to ensure that each standard is measured well and functions as intended. If the measurement strategies are not strong, then the ratings might not do their job of sorting high- and low-quality programs. For this chapter, we collected observational data and analyzed administrative data from Quality First to examine the extent to which the standards are measuring a single quality construct and the extent to which the standards are related to one another.

Program ratings as indicators of quality. The third validation activity looks closely at the QRIS ratings and the extent to which the ratings reflect meaningful differences in quality. This is an important question because program ratings are made public and are often tied to resources (e.g., access to TA, tiered subsidy reimbursement). Thus, policymakers and the public should have confidence that the overall program ratings are meaningful and reflect quality. In the current chapter, we address this question by presenting data comparing programs' Quality First ratings with scores on another measure of quality that is not used in determining Quality First ratings.

Relationship between ratings and measures of children's development. The fourth validation activity addresses the extent to which ratings are related to measures of children's development and learning. First Things First plans to address this question in the forthcoming Phase Three of the Quality First Evaluation Study.

Research Questions

The current validation study was designed to address three main research questions:

- 1. How does the distribution of Quality First star levels vary by program type?
- 2. What are the relationships between the quality elements in the Quality First Star rating scale? Are some elements more challenging than others for programs?
- 3. To what extent is the Quality First rating scale assessing program quality in expected ways? That is, are the star ratings related systematically to other measures of quality?

Study Design and Methodology

To address the research questions, we used a mixed methodology for the validation study design. This included collecting observational data in a subset of Quality First programs, administering surveys to programs taking part in the observation, as well as other Quality First participants, conducting secondary analyses of Quality First administrative data, and reviewing Quality First documents.

Program recruitment

Our goal was to recruit 240 Quality First participants for the observational data collection: 70 1- and 2-star centers, 70 3-star centers, 70 4- and 5-star centers, plus 30 1- and 2-star family child care programs. Within each group, sites were selected at random from the full population of Quality First when they

were recruited into the study.⁵⁶ However, when randomly selecting programs, we made sure that our sample had similar characteristics to that of the Quality First population in terms of number of programs at each star level, geographic location (i.e., urban, rural, or tribal), and program type (i.e., center-based or family child care). This sample was contacted via phone and invited to participate. Recruitment took place over a three-month period in 2016, and demographics for the validation sample were tracked closely throughout. While the total number of target programs was not met, the characteristics of the participating sample were similar to the characteristics of Quality First programs overall in terms of star level (i.e., 1 to 5 stars), program type (i.e., center-based or family child care home, tribal), and geographic region (i.e., urban or rural).

Our original target number for the observational data collection was a total of 240 programs from the 931 that were rated when recruitment began, as described above. We contacted a random sample of 628 Quality First programs for recruitment into the study (see Appendix E for more information about recruitment of programs). During the recruitment process, we recruited a total of 271 programs, meeting or exceeding our targets for 1- and 2-star family child care and center-based programs, as well as for 3-star center-based programs. Over the course of the study, due to programs withdrawing from the study, our total observational data collection sample was reduced to 205 programs, with a final response rate of 32% (for more information, please refer to Appendix E). Table 37 provides a comparison of the program recruitment sample conducted by our team, and Quality First population characteristics. Overall, the characteristics of the observational data collection sample looked similar to the population of programs in Quality First, with the exception of fewer family child care homes and tribal programs in the sample.

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⁵⁶ Power analyses using Optimal Design (Spybrook et al., 2011) were conducted, and results suggested that a sample size of 70 center-based programs per group would be sufficient to detect at least a 0.47 standard deviation difference between groups on observed quality measures. Practical considerations make it more difficult to observe family child care programs, so the goal was a minimum of 30 programs.

⁵⁷ See Appendix A for a complete description of all study participant characteristics.

	Programs in Quality First ⁵⁸	Total programs with external observations ⁵⁹
Star rating	N = 931	n = 205
1-Star	13 (1%)	1 (0.5%)
2-Star	408 (44%)	87 (42%)
3-Star	317 (34%)	63 (31%)
4-Star	155 (17%)	41 (20%)
5-Star	38 (4%)	13 (6%)
Provider type		
Center	767 (82%)	188 (92%)
Home	164 (18%)	17 (8%)
Provider location		
Urban	577 (62%)	132 (64%)
Rural	206 (22%)	46 (22%)
Hybrid	97 (10%)	24 (12%)
Tribal status ⁶⁰		
Tribal	52 (6%)	3 (1.5%)

Source: Quality First administrative data, 2016

Classroom observation measures used for observational data collection

The Classroom Assessment Scoring System Pre-K (CLASS Pre-K; Pianta, La Paro, & Hamre, 2008) is an observational tool that assesses the quality of the interactions between children and teachers in preschool classrooms (ages 3 to 5 years). The CLASS Pre-K has 10 dimensions that fall under three domains: Emotional Support, Classroom Organization, and Instructional Support. Each dimension is scored on a 7-point scale, with scores of 1 and 2 considered low-quality, 3 through 5 considered midrange quality, and 6 and 7 considered high-quality. Observers rate the classrooms and teachers on each of the dimensions every 30 minutes throughout the observation morning.

The Classroom Assessment Scoring System Toddler (CLASS Toddler; La Paro, Hamre, & Pianta, 2012) is an observational tool that assesses the quality of the interactions between children and teachers in toddler classrooms (ages 15 to 36 months). The CLASS Toddler has eight dimensions that fall under two

⁵⁸ Number of currently enrolled Quality First programs as of February 2016, excluding 31 programs that were pending verification at the time of recruitment. The number and percent presented in the table at each star level is out of the total number of Quality First participants.

⁵⁹ The numbers and percentages in this column are out of the total number of programs recruited for the validation study.

⁶⁰ Total tribal programs as of December 2016. Tribal programs were recruited into the sample based on their official designation as a tribal program as opposed to using the geographic location identifier, as the geographic designation identifier was not as accurate. Tribal programs were recruited later than non-tribal Quality First participants due to the tribal board research approval process.

domains: Emotional and Behavioral Support and Engaged Support for Learning. The scoring for the CLASS Toddler matches that of CLASS Pre-K.

For this validation study, CLASS Pre-K and CLASS Toddler observations were conducted in 1- and 2-star family child care and center-based programs only. Quality First assesses higher star-rated programs (3-, 4-, and 5-star) using the CLASS, so Child Trends' observations in lower star rated programs were used to supplement the administrative data already collected by Quality First. A total of 77 CLASS Pre-K observations in 71 sites and 72 CLASS Toddler observations in 66 sites were completed between March and December 2016.⁶¹ One third of classrooms at each program in the study were randomly selected for validation observations, mirroring Quality First's selection process for ratings assessment observations. If a program had both toddler and preschool classrooms, we randomly selected one-third of classrooms for each age group to receive observations.⁶²

The Early Childhood Environment- Rating Scale-Third Edition (ECERS-3; Harms, Clifford, Cryer, 2014) is an observational tool that assesses classroom quality in preschool classrooms (ages 3-5). The ECERS-3 has six subscales: space and furnishings, personal care routines, language and literacy, learning activities, interaction, and program structure. Each subscale has a series of items that are scored on a 7-point scale. Scores of 1 and 2 are considered low-quality, 3 through 5 are considered mid-range quality, and 6 and 7 are considered high-quality.

For the validation study, ECERS-3 observations were conducted at all star levels, 1 through 5, in center-based, preschool aged classrooms. The ECERS-3 was used as an independent measure of quality since it is not one of the observational tools used to assign star ratings in Quality First. At the time of the study, the companion observational measures of the ECERS-3 for infants/toddlers and family child care homes were not yet available, so observations in those classrooms/programs could not be completed using this independent measure. We completed a total of 211 ECERS-3 observations in 185 programs between March and December 2016. One third of eligible classrooms at each program in the study were randomly selected for validation observations, in line with the recommendations for this measure by the authors of the tool.

Surveys

Two surveys were administered as part of Goals 1 and 3 of the Phase I evaluation study of Quality First. One was targeted to directors in Quality First and the other was targeted to lead teachers in Quality First. There were two main goals of the surveys: 1) to gather information on participant experiences in Quality First (used to inform Goal 1 of the evaluation study), and 2) to gather descriptive information about 1- and 2-star programs that would be otherwise missing because they do not complete the QFPS⁶³ (used to inform Goal 3). The QFPS-equivalent survey questions were included to assess how 1- and 2-star programs might score on the QFPS, which is only administered to 3- through 5-star programs as a part of the ratings assessment. The surveys were sent to all Quality First participants to reach as many participants as possible; however, extra targeting efforts were made to ensure a high response rate from 1- and 2-star programs within the observational data collection group. The director survey was

⁶¹ A few programs declined to receive a CLASS observation, but did receive an ECERS-3 observation so not all 88 programs received both a CLASS and ECERS-3 observation.

⁶² 51 programs received both a CLASS Pre-k and CLASS Toddler.

⁶³ Note these data are used for descriptive purposes only. We do not combine them with Quality First Point Scale data collected by First Things First because they were collected using a different methodology and at a different point in time.

administered in March and November of 2016. A total of 438 directors participated in the survey; 27% of directors who responded were from programs in the observational data collection group. The teacher survey was administered in February 2017 and 712 teachers responded; 55% of teachers who responded (265) were from programs in the observational data collection group.

Quality First administrative data

To supplement the observational and survey data for the validation study, we analyzed a range of Quality First administrative records gathered and maintained by First Things First. As noted in Table 36, Quality First conducts an Environment Ratings Scale assessment (i.e., ECERS-R, ITERS-R, FCCERS-R) for all participating programs at all star levels. Programs that meet or exceed quality standards (3-, 4-, and 5-star level programs) are also assessed using the CLASS and the QFPS. Child Trends analyzed the ratings and individual assessment data from all current Quality First participants. This included ECERS-R, ITERS-R, FCCERS-R data from all star levels. Further, we combined First Things First's CLASS Pre-K and Toddler data from 3-, 4-, and 5-star level programs with data using those same instruments that we collected from 1- and 2-star level programs. We also analyzed the QFPS data for programs at 3-, 4-, and 5-star levels. In addition, there were some programs who applied for a 3-star rating and were assessed using the QFPS, but were unsuccessful and remained a 2-star program. QFPS data from those 2-star programs were also included in the analyses. Please see the section entitled *Data Available for Analysis* below for additional details on all data sources that were used at each of the five star levels.

Table 38 describes the types of classroom observational data that Child Trends collected, the Quality First administrative data used, and the Quality First participant surveys used to capture some QFPS equivalent data.

Table 38. All data sources for this chapter							
Programs	External Observations Conducted by Child Trends	Conducted by Child Quality First Administrative					
1- and 2-star centers	CLASS, ECERS-3	ECERS-R, ITERS-R, QFPS*	QFPS-equivalent data				
3-star centers	ECERS-3	ECERS-R, ITERS-R, CLASS, QFPS					
4- and 5-star centers	ECERS-3	ECERS-R, ITERS-R, CLASS, QFPS					
1- and 2-star family child care	CLASS	FCCERS-R, QFPS*	QFPS-equivalent data				
3-star family child care		FCCERS-R, CLASS, QFPS					
4- and 5-star family child care		FCCERS-R, CLASS, QFPS					

^{*}When available for programs that applied for a 3-star rating but ended up remaining a 2-star program.

^{**}For Quality First directors that participated in the survey; may not represent all programs in validation sample Source: Child Trends, 2017

⁻⁻Data were not collected from this program type or star level(s)

⁶⁴ The CLASS data come from a combination of data collected by First Things First (3- through 5-star) and Child Trends (1- and 2-star). Although the raters were not trained together and the ratings were done at different times, all raters were trained on the CLASS protocols and trainings to meet the authors' standards. However, it is possible that program scores were at least partially affected by this difference.

Field staff hiring and training

Field staff conducting classroom observations (i.e., observers) were hired and managed by a Tucson-based program evaluation firm, LeCroy & Milligan Associates, Inc (LMA). LMA hired 10 observers: four ECERS-3 observers, three CLASS Pre-K observers, and three CLASS Toddler observers. Child Trends oversaw and managed LMA's fielding work, including training the observers, providing support for recruitment efforts, and communicating directly with observers when there were questions about the tools and observational protocols. CLASS observers were trained to the reliability standards of the publishers, which are the same standards used by Quality First CLASS observers. ECERS-3 observers were trained to reliability by a highly-trained ECERS-3 trainer from the project team, while CLASS observers were trained to reliability by a certified Teachstone CLASS Pre-K and Toddler trainer from the project team. For more information on the ECERS-3 and CLASS observer trainings, please see Appendix E.

Data entry and verification

Data were gathered on paper in the field and then checked for errors by the observers and LMA. Data were then entered into a secure online data entry system designed to support each tool. Data were checked once more for errors by Child Trends' staff on the hard copy score sheets, and then checked against data entered into the online data entry system to ensure accuracy with the hard copies.

Data available for analysis

This study chapter includes data from CLASS in 1- and 2-star programs, ECERS-3 observations, administrative data (ECERS-R, ITERS-R, FCCRS-R, QFPS, as well as CLASS in 2-, 3-, 4-, and 5- star programs), and survey data for 1- and 2- star level programs on QFPS-equivalent data. See Table 39 for a complete description of data available for the validation analysis. For this validation study, we analyzed data on all currently enrolled Quality First participants that have a star rating (see Appendix E for information on programs that were excluded from the analysis sample). These data included Quality First administrative data as well as observations and surveys conducted by the Child Trends team.

Table 39. Observation	Table 39. Observational data collected by Child Trends available for validation analyses					
Programs		Observations				
Program type	Sample size	CLASS Toddler CLASS Pre-K ECERS-3				
Center-based	188					
1- and 2-star	71	63	69	74		
3-star	63	N/A	N/A	71		
4- and 5-star	54	N/A	N/A	66		
Family child care	17					
1- and 2-star	17	9	8	N/A		
Total	205	72	77	211		

Sources: Child Trends classroom observation data collection, Quality First administrative data, 2016

Table 40. All FTF administrative data available for validation analyses ⁶⁵						
Number of Program	Number of Obs	ervations				
	Number of					
Program type	programs	ECERS-R	ITERS-R	FCCRS-R	QFPS	
Center-based	774					
1- and 2-star	253	223	165	N/A	59	
3-star	315	248	147	N/A	268	
4- and 5-star	206	109	39	N/A	182	
Family child care	148					
1- and 2-star	54	N/A	N/A	52	8	
3-star	52	N/A	N/A	48	48	
4-and 5-star	42	N/A	N/A	32	40	
Total	922	589	351	132	605	

Source: Quality First administrative data, 2017

Table 41. Survey data collected by Child Trends available for validation analyses							
	Director survey*	Teacher survey**					
Program type	Number of programs/ directors represented in director survey	Number of programs represented in teacher survey	Teachers				
Center-based	348	314	649				
1- and 2-star	140	141	288				
3-star	129	109	223				
4- and 5-star	79	64	138				
Family child Care	66	28	28				
1- and 2-star	24	11	11				
3-star	23	9	9				
4- and 5-star	19	8	8				
Total	414	342	677				

^{*24} programs/directors had no star rating or program type

Validation Study Key Findings

This section provides an overview of the results of the validation study. We first briefly describe the characteristics of currently enrolled Quality First participants that have a star rating. Participants are described based on a number of characteristics including program setting, geographic region, and ages of children served. Next, we describe how the distribution of Quality First programs varied by star rating

^{**35} teachers representing 18 programs were missing their star rating or program type Sources: Quality First Director and Teacher surveys, Quality First administrative data, 2016

⁶⁵ Some centers had both an ECERS-R and an ITERS-R conducted (1- and 2-star: 163 programs; 3-star: 146 programs; 4- and 5-star: 35 programs).

and examine the association between Quality First elements⁶⁶ and program star ratings. We then assess whether some quality elements are more challenging for programs to meet, compared to others, preventing them from achieving a higher star rating. Lastly, we examine the extent to which star rating levels are able to differentiate across levels of quality using the ECERS-3 observations as an independent measure of quality.

What are the characteristics of Quality First participants?

At the time of data analysis⁶⁷ for the validation study, there were 922 Quality First programs who were fully enrolled in the system and had a verified rating. For more information about which programs were included in the data analysis, please see Appendix E. Most of the programs in the study were center-based, located in urban areas, and served preschool-aged children (see Table 42). A little over half of the programs were for-profit status, and/or served infants and toddlers. Very few programs, less than 10%, had tribal status, were charter school programs, and/or were in rural areas of the state of Arizona.

Table 42. Characteristics of programs	participating in Quality First (n = 922	2) ⁶⁸
	Number of programs	Percent of programs ⁶⁹
Center-based	774	84%
Family child care	148	16%
Urban	847	92%
Rural	75	8%
Tribal status	43	5%
Multi-site	182	20%
Subsidiary Corporation	90	10%
Charter	13	1%
For-profit status	542	59%
Serve infants	499	54%
Serve toddlers	588	64%
Serve preschoolers	909	99%

Source: Quality First administrative data, 2017

To gather additional information on program directors and teachers, we administered a web-based survey to all Quality First participants. The surveys were developed to learn more about participant experiences in Quality First and to fill in QFPS-equivalent information that is not typically collected by First Things First of programs seeking a 1- or 2-star rating. Tables 43 and 44 present information about director and teacher characteristics of those programs that participated in the survey.

Table 43. Characteristics of teacher and director survey respondents					
	Teachers	Directors			
Participation in classroom observation data collection	n = 712	n = 438			
Participated in the classroom observation data collection	265	119			

⁶⁶ We use the term element in this report to describe the different observation and assessment tools used as part of the rating process in Quality First. There are seven elements in all: Environment- Rating Scale (ERS) total score, three CLASS domain scores (Emotional Support, Classroom Organization, Instructional Support), and three Quality First Point Scale (QFPS) scores (Staff Qualifications, Administrative practices, and Curriculum and Assessment).

⁶⁷ Spring 2017

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⁶⁸ This number only includes programs with verified ratings that are fully enrolled in Quality First.

⁶⁹ Programs can meet multiple categories, so totals will not add up to 100%.

Table 43. Characteristics of teacher and director survey respondents		
	Teachers	Directors
Did not participate in the classroom observation data collection	447	319
Race and ethnicity*	n = 709	n = 376
Black or African American	10%	18%
White or Caucasian	57%	67%
Asian or Pacific Islander	4%	10%
Hispanic or Latino	29%	42%
American Indian or Alaska Native	5%	12%
Other	2%	2%
Highest level of education attained	n = 704	n = 375
High School Diploma or GED	16%	2%
Some college, but no degree	37%	30%
Associate degree in a non-Early Childhood or related field	7%	5%
Associate degree in Early Childhood or related field	11%	13%
Bachelor's Degree in a non-Early Childhood or related field	9%	9%
Bachelor's Degree in Early Childhood or related field	11%	15%
Graduate Degree in a non-Early Childhood or related field	4%	11%
Graduate Degree in Early Childhood or related field	5%	16%
Credentials attained*	n = 690	n = 228
CDA (Child Development Associate)	19%	37%
AMI/AMS Credential	1%	4%
State of AZ teaching certificate in ECE	9%	14%
State of AZ teaching certificate in Early Childhood SPED with ECE endorsement	3%	11%
State of AZ teaching certificate in Elementary Ed with ECE endorsement	8%	21%
None of the above	59%	-
Other	10%	42%

^{*}Response options were select all that apply

Source: Child Trends Teacher and Director Surveys, 2016

Table 44. Directors' experience in their current role and in the ECE field						
	How long have in this role at t		How many years have you worked with children birth to age 8?			
	n	%	n	%		
1-2 years	56	13%	3	1%		
2-5 years	98	22%	19	4%		
5-8 years	63	63 14%		6%		
8-10 years	50	11%	31	7%		
Less than 1 year	31	7%	1	0.2%		
Over 10 years	140	32%	86	20%		
Over 15 years	-	-	89 20			
Over 20 Years	-	-	179	41%		
Total	438	100%	435	100%		

Source: Child Trends Teacher and Director Surveys, 2016

What is the distribution of programs across star ratings?

To understand how Quality First programs are distributed across the five star ratings, we examined the number of programs at each level, and then whether this distribution of programs across different characteristics varied by star rating level (see Table 45). Results show that the programs were generally grouped in the middle, with very few at the lowest (1-star) or highest (5-star) ratings. Overall, a large majority of programs (94%) fell within the 2- to 4-star range, with most (40%) receiving a 3-star rating which Quality First defines as meeting quality standards. However, about a third of programs were rated as a 2-star which Quality First defines as approaching quality standards. An assessment of the distribution of programs across program characteristics (i.e., setting, tribal status, census area classification), within each star rating, revealed that with a few exceptions programs were distributed similarly within each star rating. There was a larger proportion of family child care programs in the 5-star rating level compared to levels 1 through 4. Furthermore, there were no tribal programs in lowest (1-star) or highest (5-star) rating levels indicating these programs largely fell in the mid-range of quality.

Table 45. Distribution of programs across characteristics, within each star rating level								
	Set	tting	Tribal	status	Census area	Census area classification		
	Center- based (n = 774)	Family child care (n = 148)	Tribal (n = 43)	Non-tribal (n = 879)	Rural (n = 75)	Urban (n = 847)		
1-star (n = 9, 1%)	88%	13%	0%	100%	0%	100%		
2-star (n=295, 32%)	82%	18%	5%	95%	8%	92%		
3-star (n=369, 40%)	86%	14%	5%	95%	7%	93%		
4-star (n=203, 22%)	86%	14%	4%	96%	12%	88%		
5-star (n=46, 5%)	70%	30%	0%	100%	7%	93%		

Source: Quality First administrative data, 2017

How did programs score across each Quality First quality element?

As described previously, the Quality First star rating is composed of seven elements: ERS total score, three CLASS domain scores (Emotional Support, Classroom Organization, Instructional Support), and three QFPS scores (Staff Qualifications, Administrative Practices, and Curriculum and Assessment). The ERS and the CLASS are measured on a scale that ranges from 1 to 7, and the QFPS elements are measured on a scale of 0, 2, 4, or 6 points.

However, not all Quality First participants are rated using all seven elements. Programs at the 3-, 4-, and 5-star levels are rated on all seven elements, whereas 1- and 2-star level programs are rated using just the ERS scores. Additionally, both Head Start and nationally accredited programs enter the Quality First rating process at a 3-star level and are assessed using only the CLASS assessment. If a program falls below the CLASS score cut off for a 3-star rating, it is assigned a lower star level. In our study, we consider these types of programs (i.e., Head Start, nationally accredited) exempt programs because they were exempt from receiving an ERS assessment. Therefore, although the overall study sample consists of 922 programs, because not all programs received a score for each quality element due to these exemptions, the sample sizes varied in some of our analyses. The samples for each quality element are described in more detail below:

• All non-exempt programs across all five-star rating levels were assessed by First Things First, using at least one *ERS* assessment (see Appendix E for more information on exemptions).

Approximately one third of classrooms in each program were assessed. A total of 728 programs had a program-level ERS score that was derived from an average of ECERS-R (n = 245), ITERS-R (n = 7), FCCERS-R (n = 132), or a combination of ITERS-R and ECERS-R scores (n = 344). When programs served both toddlers and preschoolers, or when more than one classroom was observed using the same tool, the scores were averaged to create an ERS program-level score.

- The *CLASS* was administered by First Things First in all 3-, 4-, and 5-star programs that participate in Quality First. Child Trends conducted an additional 77 CLASS Pre-K and 72 CLASS Toddler observations in 1- and 2 star- programs only, to further examine CLASS scores at the lower star levels. Approximately one-third of classrooms in each program were assessed. A total of 664 programs had a program level CLASS score, which was derived from either a) an average of Pre-K CLASS assessments (n = 281), b) an average of toddler CLASS assessments (n = 70), or c) an average of both Pre-K and toddler CLASS scores (n = 313). When programs served both toddlers and preschoolers, the Toddler CLASS Emotional and Behavioral Support domain score was averaged with the Pre-K CLASS Emotional Support Score to generate a program level CLASS Emotional Support score. Similarly, the Toddler CLASS Engaged Support for Learning domain score was averaged with the Pre-K CLASS Instructional Support score to generate a program level CLASS Instructional Support score to generate a program level CLASS Instructional Support score to generate a program level CLASS Classroom Organization domain in the Toddler CLASS, programs that only served toddler aged children (n = 70) did not receive a score in this domain.
- The QFPS elements were assessed by First Things First in all 3-, 4-, and 5-star programs that participate in Quality First (n = 538). An additional 67 2-star programs, who applied for a 3-star rating and were unsuccessful, were also assessed across all QFPS elements and included in the QFPS analyses.

Table 46 describes how programs scored across each quality element. ERS assessments indicate that, on average, classroom quality was above minimal (score of 3), but below good (score of 5). CLASS assessments showed that although, on average, Emotional Support and Classroom Organization were in the mid to high range, Instructional Support was generally in the low range. QFPS scores indicated that programs scored highest in the Administrative Practices element, compared to the Staff Qualifications and Curriculum and Assessment elements.

Table 46. Descriptive information for program-level quality elements and star ratings											
Quality element	Quality elementnMeanSt. Dev.MinMax										
ERS Total Score	728	3.69	0.80	1.39	6.39						
CLASS Emotional Support	664	6.38	0.57	3.36	7.00						
CLASS Classroom Organization	594	5.89	0.66	2.42	7.00						
CLASS Instructional Support	664	2.89	0.65	1.25	5.75						
QFPS Staff Qualifications	605	3.07	1.80	0.00	6.00						
QFPS Administrative Practices	605	4.82	1.49	0.00	6.00						
QFPS Curriculum and Assessment	605	2.92	1.50	0.00	6.00						

Source: Child Trends classroom observation data collection, 2016; Quality First administrative data, 2017

How do the Quality First quality elements and star ratings relate to one another?

It is important to understand how the Quality First quality elements relate to each other and the overall star rating and the extent to which these elements are measuring the same underlying construct.

Correlations were conducted to examine the relation between each of the elements and the star rating (see Table 47). Most quality elements were significantly correlated. It is particularly interesting that even elements using different data sources (external observers, Quality First raters) were positively correlated. However, CLASS Instructional Support domain scores were not significantly correlated with the QFPS Staff Qualification and Administrative Practices scores. Cronbach's alpha—a statistic that assesses how closely related a set of variables are—was calculated to measure the extent to which the seven quality elements measure one underlying construct. Cronbach's alpha was .70 for all seven quality elements, which is considered acceptable. Together, the correlation coefficients and Cronbach's alpha results indicate that the Quality First quality elements are related to one another and are generally measuring a single underlying construct. Please see Appendix F for more information about Cronbach's alpha and the quality elements.

Table 47. Correlations among quality elements and star ratings (n = 320)								
	1	2	3	4	5	6	7	8
1: ERS Total Score	1.00							
2: CLASS Emotional Support	0.31***	1.00						
3: CLASS Classroom Organization	0.27***	0.63***	1.00					
4: CLASS Instructional Support	0.18**	0.21***	0.28***	1.00				
5: QFPS Staff Qualifications	0.20***	0.28***	0.22***	0.03	1.00			
6: QFPS Administrative Practices	0.27***	0.33***	0.24***	0.00	0.37***	1.00		
7: QFPS Curriculum and Assessment	0.38***	0.27***	0.28***	0.16**	0.25***	0.21***	1.00	
8: Quality First Star Rating	0.61***	0.40***	0.39***	0.47***	0.31***	0.32***	0.42***	1.00

Sources: Child Trends classroom observation data collection, 2016; Quality First administrative data, 2017

Do teacher-child interactions vary by Quality First star rating level?

The current analysis examines how programs within each star rating level scored on the CLASS domains. Due to the small number of programs at the lowest and highest star levels, we combined star levels together to create three groups for analysis (low: 1- and 2-star, medium: 3-star, and high: 4- and 5-star). This analysis can reveal patterns that provide useful information about the QRIS rating structure. For instance, a pattern where all programs are reaching the highest score on an element regardless of star rating levels may indicate that the quality element is not useful in differentiating quality. A pattern in which scores are increasing incrementally by level indicates that quality element scores are differing by star rating level as expected.

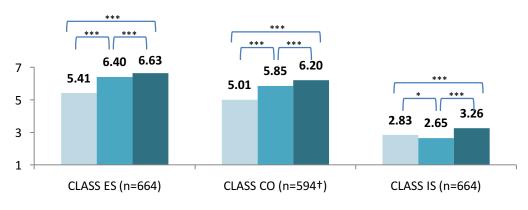
As noted, the CLASS Pre-K was conducted in 594 programs that served preschool children or a combination of preschool- and toddler-aged children, and the CLASS Toddler was conducted in an additional 70 programs that only served toddler aged children. CLASS observations in 1- and 2-star programs were conducted by Child Trends as part of the current study, and those in 3-, 4-, and 5-star programs were conducted by First Things First as part of the program's rating.

^{**} Correlation is significant at the p < .01 level, *** Correlation is significant at the p < .001 level

⁷⁰ Child Trends also conducted an analysis of changes in Cronbach's alpha when individual quality elements were removed. These findings are summarized in Appendix F. Removing any of the quality elements did not result in any substantial improvements in the Cronbach's alpha coefficient.

Figures 8 through 10 illustrate the average CLASS domain scores within each star level for all programs overall and then by setting (center-based, family child care). As seen in Figure 8, when looking at center-based and family child care combined, higher star rating levels were associated with higher CLASS domain means. Statistical tests⁷¹ indicated that each star rating group's mean (low, medium, high) was significantly different from each of the other groups on all three domains: CLASS Emotional Support (CLASS ES), Classroom Organization (CLASS CO), and Classroom Instructional Support (CLASS IS). T22, 73 In the CLASS ES and CLASS CO domains, the differences were in the expected direction, such that higher star level programs had larger CLASS domain means. In the CLASS IS domain, although the highest star level mean was significantly higher than that of the medium and lower star levels, the medium star level mean was significantly lower than that of the lower star level.





- 1- & 2-star (Enrolled with CLASS scores; n=66)
- 3-star (Enrolled with CLASS Scores; n=361)
- 4- & 5-star (Enrolled with CLASS Scores; n=237)

Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant.

†CLASS CO is not part of the CLASS Toddler observation and therefore has a smaller sample size compared to the other CLASS domains.

Source: Child Trends classroom observation data collection, 2016; Quality First administrative data, 2017

As seen in Figure 9, the pattern was similar when only center-based programs were analyzed. The means for each star rating group (low, medium, high) were significantly different from each other group for CLASS ES and CLASS CO domains, in the expected direction. The CLASS IS mean for the highest star level was significantly higher than that of the medium and low star levels; the medium and low star level CLASS IS means were not significantly different from one another.⁷⁴

⁷¹ ANOVAs were conducted to assess differences across star rating groups.

⁷² CLASS ES: F(2, 661) = 186.53, p < .0001, CLASS CO: F(2, 591) = 101.49, p < .0001, CLASS IS: F(2, 661) = 78.02, p < .0001

⁷³ Paired comparison statistics are listed in Appendix G.

⁷⁴ CLASS ES: F(2, 561) = 179.99, p < .0001, CLASS CO: F(2, 553) = 98.72, p < .0001, CLASS IS: F(2, 561) = 80.36, p < .0001

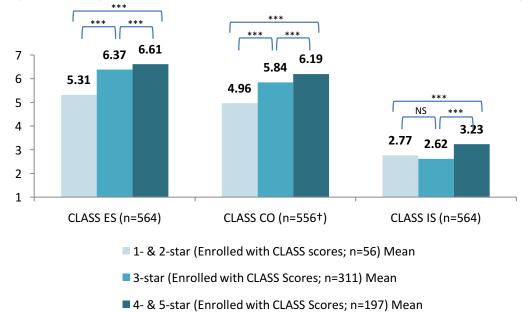


Figure 9. Average CLASS domain score by Quality First star level, in center-based programs

Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant.

†CLASS CO is not part of the CLASS Toddler observation and therefore has a smaller sample size compared to the other CLASS domains.

Source: Child Trends classroom observation data collection, 2016; Quality First administrative data, 2017

Figure 10 illustrates the average CLASS domain scores within each star group for family child care programs. For the CLASS ES, the means for each star rating group (low, medium, high) were significantly different from each other, in the expected direction. For CLASS CO, the highest group was significantly different from the lowest group, but the differences between the medium group and the other two groups were not statistically significantly. The CLASS IS mean for the highest star level was significantly higher than that of the medium star level; the low star level CLASS IS mean was not significantly different from the other star level CLASS IS means. The Nowever, these findings should be interpreted with caution, as the number of family child care providers in each rating level is small and therefore may not yield enough power to detect significant differences between the lowest and highest star rating levels.

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⁷⁵ CLASS ES: F(2, 561) = 179.99, p < .0001, CLASS CO: F(2, 553) = 98.72, p < .0001, CLASS IS: F(2, 561) = 80.36, p < .0001

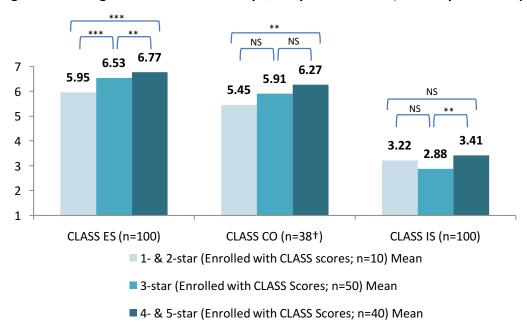


Figure 10. Average CLASS domain score by Quality First star level, in family child care programs

Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant.

†CLASS CO is not part of the CLASS Toddler observation and therefore has a smaller sample size compared to the other CLASS domains.

Source: Child Trends classroom observation data collection, 2016; Quality First administrative data, 2017

Overall, the CLASS Emotional Support and Classroom Organization domain means increased as star rating level increased. Given that CLASS is one of the tools used to determine ratings of 3-stars and higher, this finding was expected; however, it was important to test whether programs at the 1- and 2-star level that had not received a CLASS as part of their rating had lower scores than those at the higher star levels, which was in fact found.

The pattern of findings for CLASS Instructional Support provided mixed evidence that scores increase as rating level increases. When program types were combined, all star level groups were significantly different from each other. However, the medium star level group scored significantly lower than the low star level group. When the data were disaggregated by program type, the means for the low and medium star level groups were not significantly different from each other. Additionally, in family child care programs, the lowest and highest groups were also not significantly different from one another. Although many of these findings are unexpected, it is important to remember that CLASS data for 1- and 2-star rated programs were collected by Child Trends, and CLASS data for higher rated programs were collected by First Things First. Thus, these findings must be interpreted with caution as they could be explained by different data collection teams, or the lower rated programs being observed after the programs began receiving Quality First supports. Another possibility is that the CLASS IS domain is not sufficiently sensitive at the lowest end of the quality continuum to differentiate between low and medium quality. A final possible explanation is that instructional quality in lower rated programs may be in fact be similar or slightly higher than medium rated programs.

Does the quality of the classroom environment vary by Quality First star rating level?

The following analysis examined how programs within each star rating level (low: 1- and 2-star; medium: 3-star, and high: 4- and 5-star) scored on the ERS. Again, due to the group sizes at each of the five star levels, we collapsed the star levels into three groups (low, medium, high). Similar to the previous analysis, the current analysis can also reveal several patterns that provide useful information about the QRIS rating structure. A pattern where scores are increasing incrementally by level indicates that the ERS scores are differing by star rating level as expected.

The ERS (i.e., ECERS-R, ITERS-R, FCCERS-R) were conducted by First Things First as part of their rating process, and 728 program ERS were included in this validation analysis. Family child care programs were assessed using the FCCERS-R; center-based programs serving toddlers were assessed with the ITERS-R; and center-based programs serving preschool children were assessed using the ECERS-R. When programs served both toddlers and preschoolers, or when more than one observation was made using the same tool, scores were averaged to generate an ERS program-level score. Figures 11 through 13 illustrate the average ERS scores within each star level group (low, medium, high), overall, and by program type (center, family child care).

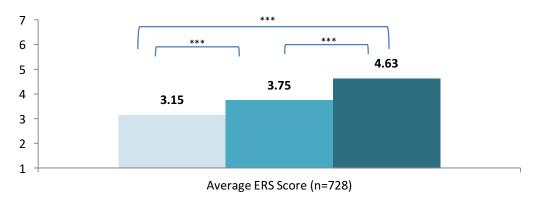
As seen in Figure 11, generally, higher star rating levels were associated with higher ERS means. Statistical tests indicated that the ERS means for each star rating level were significantly different from each other, such that the lowest star level had lower mean scores compared to the medium star level, and the highest star level and the medium star level had significantly lower mean scores compared to the highest star level (see Appendix G for pairwise comparison statistics). The same results were found when the data were disaggregated by center-based (Figure 12) and family child care programs (Figure 13). These findings were highly likely because ERS is one of the measures that makes up the star rating; however, they are nonetheless interesting because the final rating combines several different pieces of information. Confirming that the individual pieces relate to the final score in the predicted way helps to confirm that the rating scale is functioning as intended.

 $^{^{76}}$ F(2, 725) = 303.34, p < .0001

 $^{^{77}}$ F(2, 593) = 224.21, p < .0001

 $^{^{78}}$ F(2, 129) = 87.89, p < .0001

Figure 11. Average ERS score by Quality First star level

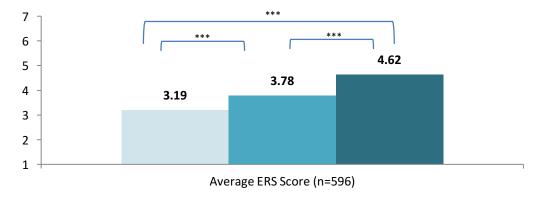


- 1- & 2-star (Enrolled programs with ERS score, n=286) Mean
- 3-star (Enrolled programs with current, non-exempt ERS score; n=297) Mean
- 4- & 5-star (Enrolled with current, non-exempt ERS score; n=145) Mean

Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant.

Source: Quality First administrative data, 2017

Figure 12. Average ERS score by Quality First star level, in center-based programs



- 1- & 2-star (Enrolled programs with ERS score; n=234) Mean
- 3-star (Enrolled programs with current, non-exempt ERS score; n=249) Mean
- 4- & 5-star (Enrolled with current, non-exempt ERS score; n=113) Mean

Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant.

Source: Quality First administrative data, 2017

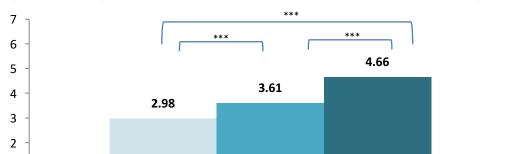


Figure 13. Average ERS score by Quality First star level, in family child care programs

Average ERS Score (n=132)

- 1- & 2-star (Enrolled programs with ERS score; n=52) Mean
- 3-star (Enrolled programs with current, non-exempt ERS score; n=48) Mean
- 4- & 5-star (Enrolled with current, non-exempt ERS score; n=32) Mean

Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant.

Source: Quality First administrative data, 2017

1

Do QFPS scores vary by Quality First star rating level?

The current analysis examined how programs within each star rating level group (low: 1- and 2-star; medium: 3-star, high: 4- and 5-star) scored on the QFPS. A pattern where QFPS scores are increasing incrementally by level indicates that the QFPS scores are differing by star rating level as expected.

The QFPS is an administrative measurement tool that is used as a part of the ratings assessment for 3-, 4-, and 5-star programs, along with the CLASS and ERS. Programs at the 1- and 2-star levels are only rated using the ERS (i.e., ECERS-R, ITERS-R, FCCERS-R). The QFPS includes three domains: Staff Qualifications (SQ), Administrative Practices (AP), and Curriculum and Assessment (CA). Programs can earn between 0 and 6 points in each domain, for a total possible score ranging from 0 to 18. Within each domain, specific components are measured (see Table 48).

Table 48. QFPS domains and components		
QFPS domains	Components	
Staff qualifications	Education	
(0-6 points)	Experience	
Administrative practices (0-6 points)	Staff retention	
	Group size	
	Ratio	
Curriculum and	Standards/program guidelines	
assessment	Curriculum	
(0-6 points)	Child Assessment	

Source: First Things First, 2016

QFPS points (0, 2, 4, or 6 points) are determined based on specific criteria within each of the three domains. Points are awarded for meeting specific criteria, and there is a minimum number of points needed for each star rating in each domain, as well as a total QFPS score required for each star rating. For instance, 3-star programs need to meet the criteria at the 2-point level in each of the three domains (Staff Qualifications, Administrative Practices, and Curriculum and Assessment) of the QFPS, for an overall QFPS score of 6 points (see Table 36). Four-star programs need an overall minimum score of 10 points on the QFPS, meeting each domain's criteria at the 2-point level or higher, and 5-star programs need an overall minimum score of 12 points on the QFPS, meeting each domain's criteria at the 4-point level or higher. The point minimums are in place to ensure that programs earn at least some points in each of the three quality domains.

Quality First only collects QFPS information for programs attempting to be rated at the 3- to 5-star rating level. However, a number of 2-star programs (n = 67) that applied for a 3-star rating were assessed by First Things First using the QFPS and are included in this analysis.

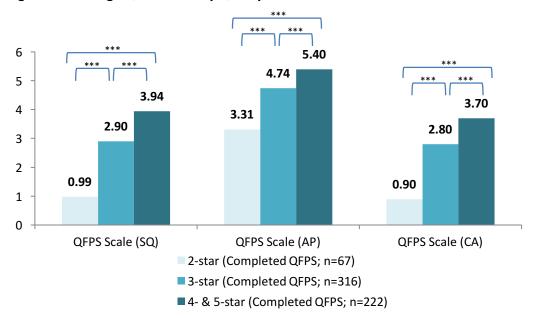
As seen in Figure 14, generally, higher star rating levels were associated with higher QFPS scores. Statistical tests indicated that the average QFPS scores calculated for each star rating level were significantly different from each other, such that the lowest star level had lower mean scores compared to the medium star level and the highest star level, and the medium star level had significantly lower mean scores compared to the highest star level. ⁷⁹ Similar results were also found in center-based programs (Figure 15). ⁸⁰ In family child care programs, although the average QFPS scores were significantly lower at the low (2) star rating level, compared to the mid (3) or high (4 and 5) star rating level, the differences in QFPS scores between mid (3) and high (4 and 5) star rating levels were small and non-significant for the Staff Qualifications and Administrative Practices elements (Figure 16). ⁸¹

⁷⁹ SQ: F(2, 602) = 94.61, p < .0001, AP: F(2, 602) = 61.32, p < .0001, CA: F(2, 602) = 133.33, p < .0001

⁸⁰ SQ: F(2, 506) = 87.15, p < .0001, AP: F(2, 506) = 61.03, p < .0001, CA: F(2, 506) = 120.08, p < .0001

⁸¹ SQ: F(2, 93) = 17.33, p < .0001, AP: F(2, 93) = 3.52, p < .05, CA: F(2, 93) = 17.56, p < .0001

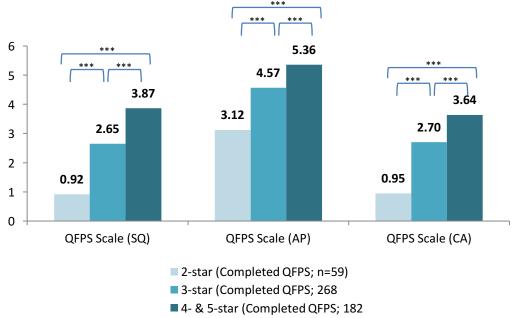
Figure 14. Average QFPS scores by Quality First star level



Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant.

Source: Quality First administrative data, 2017

Figure 15. Average QFPS scores by Quality First star level, in center-based programs



Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant.

Source: Quality First administrative data, 2017

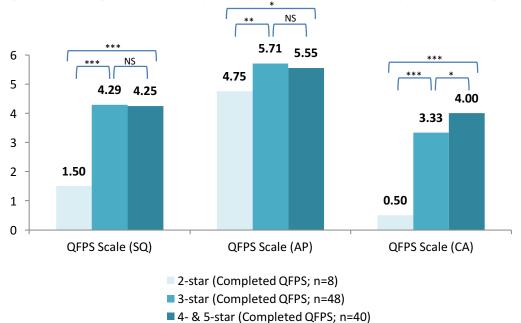


Figure 16. Average QFPS scores by Quality First star level, in family child care programs

Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant.

Source: Quality First administrative data, 2017

Director and teacher survey data on QFPS domains

Surveys were sent to all currently enrolled Quality First program directors and teachers. One of the goals of the surveys was to obtain information about 1- and 2-star programs related to the three domains of the QFPS (i.e., Staff Qualifications, Administrative Practices, and Curriculum and Assessment), as programs are only assessed using the QFPS when they attempt to be rated at the 3-, 4-, and 5-star levels. The goal of including specific questions related to the QFPS domains was to assess the extent to which survey respondents who were in lower quality-rated programs might be able to meet the QFPS criteria at the 3-star level or above. Please note that these survey findings should be interpreted with caution as they are based on those who responded to the survey, and not all survey items are equivalent to the QFPS components. Please see Appendix H for a crosswalk table comparing the QFPS domains and components to the survey items. A total of 166 directors/administrators and 286 teachers, representing 232 unique 1- and 2-star programs, were used in these analyses. Using these data, we can draw initial conclusions about how 1- and 2-star level programs might or might not be able to meet specific current requirements of the QFPS, which could be used to inform potential changes to the Quality First rating scale.

⁸² Conclusions about qualifications, education, and retention from the survey data should be also be interpreted with caution as data are self-reported and thus subject to error or bias.

⁸³ The analysis does not address whether or what type of changes could be made to the QFPS criteria.

Staff Qualifications

QFPS Staff Qualifications requirements

Staff Qualifications requirements for the QFPS include a range of education and experience criteria, and vary by program type. Two points is the minimum score required at the 3- and 4-star levels, and programs can receive up to 6 points on the Staff Qualifications element of the QFPS (see Table 49).

Table 49. Minimum and maximum point criteria for Staff Qualifications				
Domain area	Two-point criteria	Six-point criteria		
	Center-based program criteria			
Experience	25% of Teachers, Directors, and Assistant	25% of Teachers, Directors, and Assistant		
	Directors must have one year of ECE	Directors must have 6 months of experience		
	experience; and	in ECE; and		
Education	12 college credit hours in the early childhood	25% of center staff must have BA or BS in ECE		
	or related fields; or a certificate of	or related field <i>or</i> State of AZ Teaching		
	completion in ECE or child development from	Certificate in ECE or State of AZ Teaching		
	a community college; or a CDA; and	Certificate in Early Childhood Special		
		Education with ECE endorsement or State of		
		AZ Teaching Certificate in Elementary		
		Education with ECE endorsement; and		
	50% of assistant teachers must have 6	All other staff at the program must meet the		
	months of experience working in an ECE	education and experience requirements at		
	program	the 2-point level		
	Family child care (FCC) program criteria			
Experience	FCC providers must have one year of	FCC providers must have 1 year of experience		
	experience in an ECE program; and	in an ECE program; and		
Education	FCC providers must have six college credit	FCC providers must have an AA or AAS; or BA		
	hours in ECE or related fields; or a certificate	or BS in ECE or any field with at least 15		
	of completion in ECE or child development	college credit hours in early childhood or		
	from a community college; or a CDA	related fields		

Source: Quality First, 2016

Survey findings on 1- and 2-star Staff Qualifications

In the surveys, directors and teachers were asked about their degrees, number of years of experience in the ECE field, and any other credentials they have attained. For Staff Qualifications, responses to the surveys were analyzed at the individual staff level (i.e. survey data from both lead teachers and directors). QFPS includes criteria that are based on percentages of program staff meeting specific requirements. Not all teachers and directors responded, and we did not have a way to estimate center-level values; therefore, the directors and teachers responding to the survey were used as a proxy for 25% of the staff at their program.⁸⁴

Years of experience. Almost all (97%) of the 1- and 2-star center-based respondents had at least one year of experience in an ECE program as required to obtain 2 points. Similarly, all 1- and 2-star FCC survey respondents (n = 40) reported having at least one year of experience in an ECE program. Since

⁸⁴ This does not include assistant teachers, as the teacher survey was only sent to lead teachers at Quality First programs.

the QFPS requires one year of ECE experience for 25% of lead teachers and administrators in centers at the 3-, 4-, or 5-star levels, survey respondents in 1- and 2-star center-based and FCC programs would meet this requirement.⁸⁵

Educational attainment. Forty one percent of 1- and 2-star center providers had 12 college credit hours in ECE, a Child Development Associate (CDA), or a certificate of completion in ECE or child development from a community college. The QFPS requires at least 25% of program staff to have these educational qualifications to receive 2 points, which is the minimum at the 3- and 4-star levels. Additionally, about one third of center teachers and directors (32%) responding to the surveys had at least a Bachelor's degree in ECE or state teaching certificate in ECE, which is required for programs to receive the full 6 points on the QFPS Staff Qualifications education criteria.

Thirty-five percent of 1- and 2-star FCC providers had six college credit hours in ECE or a certificate of completion in ECE or child development from a community college, which is the minimum at the 3- and 4-star levels for FCC providers. Only 10% of FCC survey respondents had at least an Associate degree (AA) in ECE or an AA that includes at least 15 college credit hours in ECE or a Bachelor's with at least 15 college credit hours in ECE, which is required for FCC homes to receive the full 6 points on the QFPS Staff Qualifications education criteria.

These findings indicate that many 1- and 2-star centers and FCC homes would meet the experience requirements. The educational requirements would possibly prevent many centers and FCCs from attaining a higher star rating, but a sizeable minority would likely meet these requirements. Please see Table 50 for a summary of survey findings on Staff Qualifications for all QFPS point levels. Directors were also asked about what challenges their programs faced in helping staff gain or achieve educational qualifications. About one third of directors at all star levels reported a lack of financial resources to access professional development or other education or training, and over half of all directors reported a lack of available time to attend a class or training being a challenge. In comparison, only about a quarter of teachers at all star levels reported a lack of financial resources being a barrier to gaining educational qualifications, but over half of all teachers reported a lack of time available to attend a class or training as the biggest challenge.

Table 50. Summary of survey findings on Staff Qualifications for 1- and 2-star respondents			
Domain area	Percent of staff that	Percent of staff that	Percent of staff that
	met the 2 Pt criteria	met the 4 Pt criteria	met the 6 Pt criteria
Center-based respondents			
Experience	97%	97%	97%
Education	41%	32%	32%
Family child care respondents			
Experience	100%	100%	100%
Education	35%	35%	10%

Source: Child Trends' Teacher and Director Surveys, 2016

Administrative Practices

QFPS Administrative Practices requirements

QFPS requirements for the Administrative Practices domain include criteria related to ratio, group size, and staff retention, which vary by program type. Two points is the minimum score required at the 3- and

 $^{^{85}}$ When staff have a Bachelor's degree or higher in ECE, the QFPS requires 6 months of experience.

4-star levels, and programs can receive up to 6 points on the Administrative Practices element of the QFPS (see Table 51).

Table 51. Minimum and maximum point criteria for Administrative Practices				
Domain	Two-point criteria	Six-point criteria		
area	1 Wo-point circeria			
	Center-based program criteria			
Ratios and	Group sizes must be a maximum of no more	The program's ratio and group sizes must		
Group Size	than two times the ratio requirement of	meet the following requirements for every		
	children per a single adult:	classroom and ages of children served:		
	 Infants 1:5, max of 10 children 	 Infants 1:4, max-of 8 children 		
	• 12-24 months 1:6, max of 12 children	• 12-24 months 1:4, max of 8 children		
	• 2 year olds 1:8, max of 16 children	• 2 year olds 1:6, max of 12 children		
	• 3 year olds 1:13, max of 26 children	• 3 year olds 1:9, max of 18 children		
	• 4-5 year olds 1:15, max of 30 children	• 4-5 year olds 1:10, max of 20 children		
	and	and		
Staff	Over the previous two years, the retention	Over the previous three years, the retention		
Retention	rate for directors, assistant directors, and	rate for all classroom staff cannot not fall		
	lead teachers cannot fall below 60%	below 65%		
	Family child care program criteria			
Ratios and	FCC ratios and group sizes must meet the	FCC providers must meet the following ratio		
Group Size	following:	and group sizes:		
	• A ratio of 1:5; max of 5 children enrolled	 A ratio of 1:4, max 5 children enrolled 		
	Between 6-10 children enrolled a ratio of	 Between 6-10 children enrolled a ratio of 		
	1:5, max of 10 children	1:4, max of 10 children		
	and	and		
Staff	Over the previous two years, the retention	Over the previous three years, the retention		
Retention	rate for the provider cannot fall below 60%	rate for all staff cannot not fall below 65%		

Source: Quality First, 2016

Survey findings on 1- and 2-star Administrative Practices

In the surveys, directors were asked about their maximum ratios and group sizes for each age group served, as well as how many staff (including directors, assistants, teachers, other classroom support staff) left the program in the last two and three years. Staff retention data were combined with Quality First's administrative data regarding total number of staff, to calculate a retention rate. For Administrative Practices, only director survey responses were analyzed, since these practices are reported at the program level in the QFPS.

Ratios and group size. Most of the 1- and 2-star center (88%) and FCC (89%) respondents met the ratio requirements needed to receive 2 points, which is the minimum requirement for 3- and 4-star level programs. All FCC provider survey respondents met the group size requirements needed to receive 2 points, whereas just over one third (37%) of center-based survey respondents met the 2-point group size requirements.

Administrative data from Quality First only include staffing totals for teaching staff. Thus, no other administrative staff could be included in our two-point retention calculations.

In addition, all or most (89%) FCC providers met the 4-point ratio and group size requirements, which is the minimum requirement for 5-star programs.

Staff retention. About half of the 1- and 2-star center (58%) and FCC providers (50%) responding to the survey had a retention rate for their teaching and administrative staff above 60% over the previous 2 years, which is the minimum requirement at the 3- and 4-star levels. Furthermore, about half of the 1- and 2-star center⁸⁷ (54%) and FCC providers (52%) responding to the survey also had a retention rate for their teaching staff above 65% over the previous 3 years, which is the minimum retention rate requirement to receive 6 points. When asked if directors felt they had an ongoing issue with staff retention, about 20% of urban and rural programs said they experienced regular turnover, while a third of them reported rarely experiencing turnover. Of the eight tribal programs that responded to the survey, half of them reported experiencing regular turnover.

These findings indicate that many of the 1- and 2-star FCC homes would likely meet the ratio requirements needed to attain 2 and 4 points, while fewer centers would be able to meet these requirements. Similarly, 1- and 2-star FCC programs would likely be able to meet the group size requirements needed to attain up to 6 points, while a sizable majority of center-based programs probably would not be able to meet the group size requirement to attain 2 points or higher. The staff retention requirements would possibly prevent about half of 1- and 2-star centers and FCC programs from attaining a higher star rating. Please see Table 52 for a summary of survey findings on Administrative Practices for all QFPS point levels.

Table 52. Summary of survey findings on Administrative Practices for 1- and 2-star respondents			
Domain area	Percent of programs that	Percent of programs that	Percent of programs that
	met the 2 Pt criteria	met the 4 Pt criteria	met the 6 Pt criteria
Center-based respondents			
Staff Retention	58%	53%	54%
Group Size	37%	35%	19%
Ratios	88%	34%	15%
Family child care respondents			
Staff Retention	50%	50%	52%
Group Size	100%	100%	100%
Ratios	89%	89%	32%

Source: Child Trends' Teacher and Director Surveys, 2016

Curriculum and Assessment

QFPS Curriculum and Assessment requirements

Curriculum and Assessment requirements include a range of state standards along with curriculum planning and assessment processes, which are the same for both center-based and FCC providers. Two points is the minimum score required at the 3- and 4-star levels, and programs can receive up to 6 points on the Curriculum and Assessment element of the QFPS (see Table 53).

⁸⁷ Only 113 programs had valid data for assessing the six point criteria, because fewer respondents could identify how many staff had left in the past three years compared to two.

Domain area	Two-point criteria	Six-point criteria	
State Standards	Teachers, directors, and assistant directors have completed the approved 2-hour training on the	Teachers, directors, and assistant directors have completed the approved training on at least two of the modules of the AZELS or ITDGs; -	
	Introduction to the ITDGs, and AZELS; or have a valid Arizona Early Childhood Teaching Certificate or Endorsement (for teachers only); and	the modules of the AZELS of Tibes,	
Curriculum	The AZELS and ITDGs are clearly reflected in the written activity plans; and There is a written process for sharing curriculum with families; and	Written activity plans that include strategies, modifications, and/or adaptations to fully involve all children with special health and/or developmental needs, including gifted and talented; or N/A for activity plans when no children with special health and/or developmental needs are enrolled in the	
Assessment	Assessment of children's growth and development is an ongoing process and is conducted during children's daily activities and routines to assess progress in the four domain areas of social, emotional, cognitive and physical development; and	including developmental and sensory screening activities (either provided directly or arranged for by the provider); and tive and	
	Parent teacher conferences are offered once per year	When necessary, families are referred to appropriate health or intervention agencies; and Parent teacher conferences are offered twice per year	

Source: Quality First, 2016

Survey findings on 1- and 2-star Curriculum and Assessment practices

In the surveys, directors and teachers were asked about their credentials, curriculum planning and assessment processes, and teacher conferences. The surveys did not include questions about participating in state standards trainings, specific child assessment methods such as observational checklists, or family referrals; thus, those criteria were not included in this analysis of 1- and 2-star programs, and our analysis was limited to only the criteria that were included in both the survey and QFPS. For Curriculum and Assessment, responses to the surveys were analyzed at the individual staff level (i.e. survey data from both lead teachers and directors).

Child Assessment Processes. About one third (31%) of the 1- and 2-star center-based providers responding to the surveys reported conducting regular, ongoing assessments of their children's growth and development and holding parent teacher conferences at least once per year, which would meet the QFPS requirements at the 3- and 4-star levels. Only 16% of the teachers and directors reported providing or arranging for developmental screenings (e.g. vision, hearing, etc.) and offering parent teacher conferences at least twice per year, which is required for programs to receive the full 6 points on the QFPS Assessment criteria. However, most (86%) 1- and 2-star center-based teachers and directors did report conducting assessments of their children's growth and development by gathering

and documenting information received from families during conferences, which is one of the requirements for receiving 4 points on Assessment, a minimum requirement for 5-star programs.

Just over half (56%) of the 1- and 2-star FCC providers responding to the surveys reported conducting regular, ongoing assessments of their children's growth and development and holding parent teacher conferences at least once per year, which would meet the QFPS requirements at the 3- and 4-star levels. Only 9% (n = 3) of these providers reported providing or arranging for developmental screenings (e.g. vision, hearing, etc.) and offering parent teacher conferences at least twice per year, which is required for programs to receive the full 6 points on the QFPS Assessment criteria. However, almost three-quarters (73%) of the 1- and 2-star FCC providers did report conducting assessments of their children's growth and development by gathering and documenting information received from families during conferences, which is one of the requirements for receiving four points on Assessment, a minimum requirement for 5-star programs.

Curriculum Practices. One quarter of the 1- and 2-star center-based providers responding to the surveys reported having a valid Arizona Early Childhood Teaching Certificate or Endorsement, incorporated the Arizona Early Learning Standards and Infant-Toddler Developmental Guidelines in their written activity plans always or most of the time, and had a written process for sharing curriculum with families. These Curriculum Practices are required in the QFPS at the 3- and 4-star levels. However, almost all (92%) of these providers had an Early Childhood Teaching Certificate or Endorsement and written curriculum plans that allowed for individual modifications based on a child's needs or skills, and include strategies, modifications, and/or adaptations to fully involve children with special health or developmental needs, which is required for programs to receive the full 6 points on the QFPS Assessment criteria. In addition, most (88%) of the 1- and 2-star center-based providers responding to the surveys had written curriculum plans that included specific learning objectives for children based on each child's documented or observed assessment information. This is an additional Curriculum Planning criteria requirement needed to receive 4 points, a minimum requirement for 5-star programs.

For 1-and 2-star FCC providers responding to the surveys, just over half (55%) reported having a valid Arizona Early Childhood Teaching Certificate or Endorsement, incorporated the Arizona Early Learning Standards and Infant-Toddler Developmental Guidelines in their written activity plans always or most of the time, and had a written process for sharing curriculum with families. These Curriculum Practices are required in the QFPS at the 3- and 4-star levels. In addition, most (83%) of these providers had an Early Childhood Teaching Certificate or Endorsement and written curriculum plans that allowed for individual modifications based on a child's needs or skills, and include strategies, modifications, and/or adaptations to fully involve children with special health or developmental needs, which is required for programs to receive the full 6 points on the QFPS Assessment criteria. The same percentage have written curriculum plans that included specific learning objectives for children based on each child's documented or observed assessment information, an additional Curriculum Planning criteria requirement needed to receive 4 points, a minimum requirement for 5-star programs.

These findings indicate that many 1- and 2-star centers and FCC programs would likely meet the curriculum and assessment criteria needed to attain 4 points, but perhaps are less likely to attain the 2 points first needed to receive a 3-star rating. FCC programs may be more likely than center-based programs to meet both the Curriculum and Assessment requirements needed to attain 2 points. Please see Table 54 for a summary of survey findings on Curriculum and Assessment for all QFPS point levels.

Table 54. Summary of survey findings on Curriculum and Assessment for 1- and 2-star respondents			
Domain area	Percent of staff that met	Percent of staff that met	Percent of staff that met
	the 2 Pt criteria	the 4 Pt criteria	the 6 Pt criteria
Center-based respondents			
Curriculum	25%	88%	92%
Assessment	32%	86%	16%
Family child care respondents			
Curriculum	55%	83%	83%
Assessment	56%	73%	9%

Source: Child Trends' Teacher and Director Surveys, 2016

In their surveys, directors and teachers were also asked about their specific curriculum and assessment practices. Sixty-six percent of teachers and 75% of directors reported that they currently follow a specific curriculum for preschool, with Creative Curriculum being the most frequently used curriculum. Similarly, over half of directors and teachers reported using an assessment tool to conduct regular child assessments for preschoolers. For teachers, almost half (47%) reported collecting child assessment data weekly or daily and over half reported using these data for planning large and small group activities, creating lesson plans, and collaborating with parents to design goals for their children. Furthermore, most (75%) teachers reported that they are "very confident" engaging families in discussions about their children's growth and learning, and almost all (80%) reported that they include learning objectives for children based on assessment information "most of the time" or "always."

Which quality elements are more challenging than others?

The Quality First Rating Scale is a hybrid system that has some elements of a block design and some elements of a points design. In Quality First, programs are rated on a 1-star to 5-star scale, depending on their scores on the ERS, CLASS, and/or QFPS. The 1- and 2-star levels are blocks, in that programs need a minimum score on the ERS to achieve the rating and the ERS is the only quality element required at those levels. The 3- to 5-star levels are hybrid, in that programs need to meet minimum scores for each level on the ERS and CLASS, but can then earn points in a variety of ways on the QFPS. A minimum number of points is needed to move up to each higher star level. Because of the block elements of the rating structure, scores on one quality element could keep a program from moving up the rating scale, despite scoring higher on all other quality elements.

The next analysis aims to examine what quality elements might be more challenging for programs to meet based on the scoring criteria. That is, which of the three major quality elements of the rating (ERS, CLASS, QFPS) are most challenging for programs and therefore the scoring criteria requirements may be preventing them from achieving a higher star level? Findings from this analysis can be used to determine where additional quality supports may be needed. To explore these questions, we examined scores that programs attained on different quality elements of the rating, to see how they compared to the minimum scores required to reach the next higher star rating. ⁸⁸ For example, how often do 2-star programs meet the CLASS score requirements to be a 3-star program? These types of analyses can help us understand which quality element or elements are driving the ratings.

 $^{^{\}rm 88}$ Group sizes were too small to examine cutoff scores by program type at all star levels.

Two-star programs

We examined the percentages of 2-star programs that attained observation scores (ERS or CLASS) that would meet the 3-star cutoff. In Quality First, programs need a minimum ERS score of 3.0 to achieve a 3-star rating, and 1- and 2-star programs are not assessed using the CLASS, unless they are going up for a 3-star rating. However, Child Trends conducted an additional set of CLASS observations in 1- and 2-star programs to further examine CLASS scores in the lower star levels. As shown in Figure 17, 52% of 2-star programs in the study met the cutoff criteria for a 3-star program on ERS.

Using data from Child Trends CLASS observations, nearly all (89%) of 2-star programs meet the 3-star cutoff for CLASS Emotional Support and most (78%) meet the cutoff for CLASS Classroom Organization (78%) and CLASS Instructional Support (90%; see Figure 17). These findings suggest that for many 2-star programs, low ERS scores prevented them from reaching 3-star ERS score requirements. For a smaller subgroup, the CLASS Classroom Organization subscale scoring requirement is a challenge.

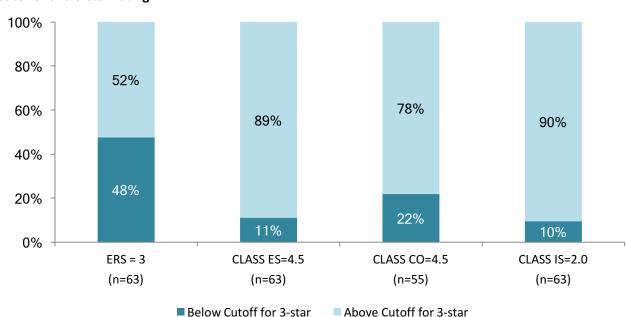


Figure 17. Percentages of 2-star programs that attained ERS and CLASS scores above and below the cutoffs for a 3-star rating

Source: Child Trends classroom observation data collection, 2016; Quality First administrative data, 2017

The final quality element that determines whether programs achieve a 3-star rating is the QFPS. That is, programs could successfully meet the ERS and CLASS requirements to reach 3-stars, but not meet the QFPS requirements. To receive a 3-star rating, programs must attain at least 2 points in each of the QFPS domains, and a total of 6 points across the QFPS domains. The percentages of 2-star programs achieving the 3-star cutoff for QFPS are presented in Figure 18. ⁸⁹ The three individual domain bars (Staff Qualifications (SQ), Administrative Practices (AP), Curriculum and Assessment (CA)) indicate the percentage of programs meeting the 2-point minimum. The Sum QFPS bar indicates the percentage of programs that met the requirement of scoring at least 6 points across the domains, regardless of their

⁸⁹ Only 2-star programs applying for a 3-star rating were included in this analysis, as these are the only 2-star programs assessed using the QFPS.

scores within each individual domain. The QFPS All Elements bar indicates the percentage of programs that met the requirements for each domain as well as the overall QFPS sum.

100% 37% 80% 40% 61% 73% 60% 99% 40% 63% 60% 20% 39% 27% 0% **QFPS All Elements** QF SQ =2 QFAP = 2QFCA = 2Sum QFPS = 6 (n=67)(n=67)(n=67)(n=67)(n=67)■ Below Cutoff for 3-Star Above Cutoff for 3-Star

Figure 18. Percentages of 2-star programs that attained QFPS scores above and below the cutoffs for a 3-star rating

Source: Quality First administrative data, 2017

While 2-star programs varied on their ability to meet cutoffs on each of the domains of the QFPS, nearly two-thirds (61%) of 2-star programs were able score a sum of 6 on the scale (see the bar labeled *Sum QFPS*), which is required for a 3-star rating. However, it was difficult for 2-star programs to earn the minimum of 2 points on Staff Qualifications and Curriculum and Assessment needed to reach the 3-star rating. Therefore, the Staff Qualifications and the Curriculum and Assessment domains in particular play a role in holding 2-star programs back from reaching 3-stars. Put another way, programs would be more likely to attain the 3-star level if total points were used, rather than requiring a minimum score on each part.

Three-star programs

The analyses were repeated to see how 3-star rated programs scored on Quality First standards relative to the cutoff scores for reaching a 4-star rating. In Quality First, 3-star programs are assessed using the ERS, CLASS, and QFPS. To determine which quality elements were most challenging for programs, this analysis was conducted using 246 3-star programs that had scores on all three quality elements. Typically, Quality First rates programs using the ERS, followed by the CLASS, and then the QFPS. However, there are some exceptions to this process that result in some programs missing scores in one or more quality elements (ERS, CLASS, QFPS). For instance, if a program is accredited by a nationally recognized organization or is a Head Start program, the CLASS assessment is conducted first to recognize their efforts to improve quality through accreditation standards or Federal Head Start regulations. If

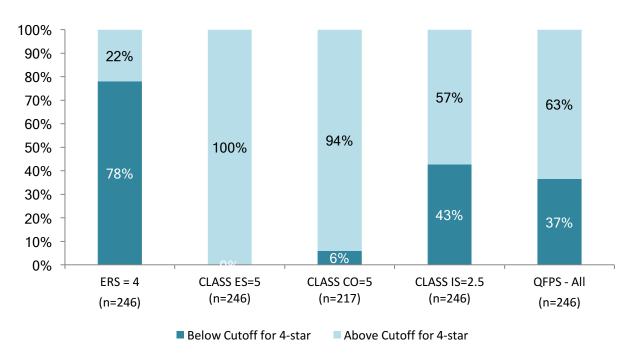
these programs attain CLASS scores that meet the cutoffs for a 3-, 4-, or 5-star rating, they will not be assessed using the ERS, but will have a CLASS and QFPS score.

In Quality First, programs need an average total ERS score of 4.0 to reach a 4-star rating. As shown in Figure 19, only 22% of 3-star programs earned at least a 4.0 on the ERS, suggesting that, relative to the other quality elements, the ERS scoring criteria is the most challenging element and is preventing many 3-star programs from attaining a higher rating.

To meet a 4-star rating, programs need an average score of 5.0 in the CLASS Emotional Support and Classroom Organization domains and an average score of 2.5 in the CLASS Instructional Support Domain. The analyses showed that all 3-star programs in the sample met the cutoff for CLASS Emotional Support, and 94% met the cutoff for Classroom Organization. However, fewer programs (57%) met the 4-star criteria for Instructional Support, indicating that the scoring requirements for this subscale of the CLASS also appears to be a challenge for 3-star programs and would keep almost half of them from reaching a 4-star rating.

In Quality First, for programs to reach a 4-star rating, they must also meet QFPS domain-level cutoffs, as well as a cutoff for the overall sum across all QFPS domains. The bar labeled QFPS-All shows the percentage of programs that met and did not meet all of the QFPS requirements needed to attain a 4-star rating. Results showed that QFPS may also be a potential challenge, as over one third of 3-star programs would not reach the 4-star cutoff requirements.

Figure 19. Percentages of 3-star programs that attained quality element scores above and below the cutoffs for a 4-star rating



Source: Quality First administrative data, 2017

Figure 20 provides a closer look at each of the individual QFPS requirements. To reach a 4-star rating, 3-star programs are required to have a minimum score of 2 within each of the QFPS domains (SQ, AP, CA),

along with a total of 10 points. As shown in this figure, all 3-star programs scored at least 2 points in each domain of the QFPS, as these are the same minimum cutoffs required to attain a 3-star rating. Therefore, the only potential QFPS-related challenge 3-star programs may encounter in moving to a 4-star rating is the required 10-point sum across the QFPS domains (compared to the required 6-point sum for 3-star programs). Indeed, as discussed previously, over one third of programs were unable to meet this cutoff.

100% 90% 80% 70% 63% 63% 60% 100% 100% 100% 50% 40% 30% 20% 37% 37% 10% 0% 0% 0% 0% QFAP = 2Sum QFPS = 10 QFPS All Elements QFSQ=2QFCA = 2(n=246)(n=246) (n=246)(n=246)(n=246)■ Below Cutoff for 4-star ■ Above Cutoff for 4-star

Figure 20. Percentages of 3-star programs that attained QFPS scores above and below the cutoffs for a 4-star rating

Source: Quality First administrative data, 2017

Four-star programs

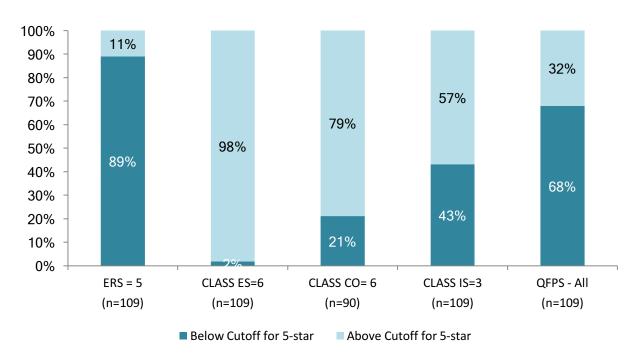
Lastly, we conducted the same analyses to see how 4-star programs scored on Quality First standards relative to the cutoff scores required to reach a 5-star rating. Again, to determine which quality element scoring requirements were most challenging for programs, this analysis was conducted using 109 4-star programs that had scores across all three quality elements. In Quality First, programs need an average total ERS score of 5.0 to attain a 5-star rating. As shown in Figure 21, only 11% of 4-star programs earned at least a 5 on the ERS, suggesting that, relative to the other quality elements, the ERS scoring criteria is the most challenging element that may be preventing 4-star programs from attaining a 5-star rating. As discussed earlier, the ERS scoring criteria was also the most challenging quality element for 3-star programs.

To meet a 5-star rating, programs need an average score of 6.0 in the CLASS Emotional Support and Classroom Organization domains and an average score of 3.0 in the CLASS Instructional Support domain. The analyses showed that 98% of 4-star programs met the cutoff for CLASS Emotional Support, 79% met

the cutoff for CLASS Classroom Organization, and 57% met the cutoff for CLASS Instructional Support. These results indicate that the CLASS Instructional Support scoring requirement may also pose a challenge for a subgroup of 4-star programs in moving up the Quality First rating scale, but to a lesser extent than the ERS.

Finally, to meet a 5-star rating programs must also meet a minimum cutoff score of 4 points within each QFPS domain, as well as the overall sum of 12 points across QFPS domains. The bar labeled QFPS-All shows the percentage of programs that met and did not meet all the QFPS requirements needed to attain a 5-star rating. Analyses showed that QFPS is the second most challenging quality element, as approximately two thirds of 4-star programs did not reach the 4-star cutoff for this quality element.

Figure 21. Percentages of 4-star programs that attained quality element scores above and below the cutoffs for a 5-star rating



Source: Quality First administrative data, 2017

Figure 22 provides a closer look at each of the individual QFPS requirements. To reach a 5-star rating, 5-star programs are required to have a minimum score of 4 within each of the QFPS domains (SQ, AP, CA), and a total of 12 points. As shown in this figure, 54% of programs met the cutoff requirements in the Staff Qualifications domain, 97% met the cutoff in the Administrative Practices domain, and 64% met the cutoff in the Curriculum and Assessment domain. These results indicate that the Staff Qualifications domain requirements pose a challenge for nearly half of 4-star programs, and the Curriculum and Assessment domain requirements pose a challenge for about a third of programs. Additionally, over one third of 4-star programs were also unable to meet the required 12-point sum across the QFPS domains, indicating this is also a challenge in moving up the Quality First Star Rating Scale.

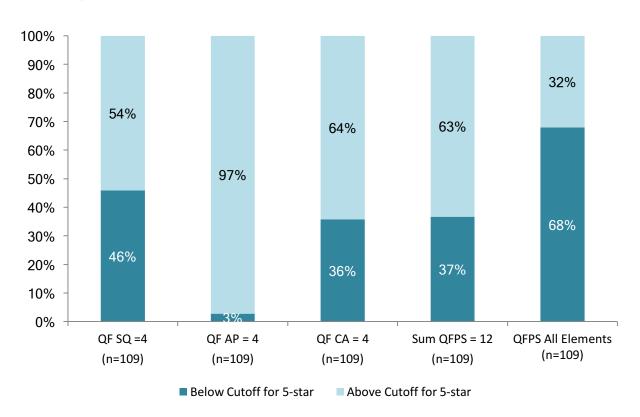


Figure 22. Percentages of 4-star programs that attained QFPS scores above and below the cutoffs for a 5-star rating

Source: Quality First administrative data, 2017

These analyses examined which quality elements might be more challenging for programs to meet based on the scoring criteria. Findings indicate that for 2-star programs, most meet the scoring criteria for the CLASS domains needed for a 3-star, while only have of 2-star programs meet the cutoff criteria for a 3-star level on the ERS scores. When examining the QFPS domains, Staff Qualifications and Curriculum and Assessment were the two domains that were most challenging for programs to score enough points on to reach the 3-star rating. For 3-star programs, both the ERS and CLASS scoring requirements needed to reach a 4-star level were challenging for programs to meet. Furthermore, while 3-star programs could all meet the QFPS requirements of scoring at least 2 points in all three domains (which is required to attain a 3-star rating), only a third of 3-star programs could meet the 4-star requirement of scoring a total of 10 points on the QFPS. Lastly, as seen with 2- and 3-star programs, scoring criteria for the ERS needed to attain a 5-star rating was a challenge for 4-star programs. On the other hand, most 4-star programs scored high enough on the CLASS ES and CO domains needed to reach the 5-star level, while a little over half of programs scored high enough to reach the cutoff for the CLASS IS domain. Almost all programs could meet the cutoff requirements for the Administrative Practices domain on the QFPS, while only about half could meet the requirements of the Staff Qualifications and Curriculum and Assessment domains at the 5-star level.

Variance in star ratings

Another way to assess which quality elements are driving the final star rating is by identifying which quality elements scores (i.e., ERS, CLASS ES, CO, IS, and QFPS) are better predictors of the variation in star ratings across programs. An additional analysis was conducted to assess what percentage of the variance in star ratings is accounted for by each quality element when all other quality elements are held constant. This analysis was only conducted on 3-, 4-, and 5-star programs, as these programs are rated using all quality elements. Results of this analysis aligned with findings from the cutoff analyses, which indicated that the ERS was the main driver of the star rating and explained the highest percentage of the variance in star ratings, followed by the CLASS Instructional Support domain (please refer to Appendix I for the analyses). Similarly, these quality elements (ERS and CLASS Instructional Support) were also two of the most challenging elements for 3- and 4-star programs in the cutoff analyses. When accounting for all the other quality elements, the QFPS domains explained only a small percent of the variance in star ratings, and the CLASS Emotional Support and Classroom Organization domains did not predict a significant amount of variance in star ratings. This is congruent with the earlier finding that almost all 3- and 4-star programs exceed the cutoffs on these elements for the next higher star rating, and are therefore not primary drivers of the scores. Since the ERS and CLASS IS scoring criteria are the most challenging elements for programs, these scores are more likely to align with the star rating the program received, whereas scores on the other quality elements may be slightly higher.

Participant perceptions of quality element challenges

Directors and teachers in Quality First programs were asked to respond to a survey about their perceptions of the rating scale quality elements, including perceived barriers to achieving a higher rating, benefits and challenges with the assessment tools used in the rating, and challenges with the QFPS requirements. Directors from 430 programs and teachers from 389 programs (out of 930) responded, although not all respondents answered all the questions (see Appendix A for survey responses).

Perceived barriers to achieving higher star ratings

Both directors and teachers were asked to identify the top two barriers they perceived as preventing their program from receiving a higher star rating. The CLASS assessment was reported as the biggest perceived challenge to receiving a higher rating for both directors (39%) and teachers (23%). While directors also reported staff qualifications (39%) as a top challenge, teachers were less likely to report that as a challenge (17%), instead reporting staff turnover (24%) and staff's understanding of the practices measured by the CLASS (20%) as larger barriers to higher ratings.

Additionally, directors were more likely to identify curriculum and child assessment practices as top barriers to higher ratings (14% and 12%, respectively) compared to teachers (8% and 6%, respectively). Teachers, on the other hand, more commonly identified teacher-child ratios (19%) as a barrier to a higher star rating, while only five percent of directors saw this as a barrier. See Table 55 for additional detail.

Table 55. Comparison of barriers to achieving a higher star rating by Quality First directors and teachers						
Top two barriers to achieving a higher star rating Directors Teachers						
(n = 406) (n=639)						
The CLASS assessment score	39%	23%				

Table 55. Comparison of barriers to achieving a higher star rating by Quality First directors and teachers					
Top two barriers to achieving a higher star rating	Directors	Teachers			
	(n = 406)	(n=639)			
Staff qualifications	39%	17%			
Staff turnover	17%	24%			
The ERS assessment score	19%	15%			
Staff's understanding of the practices measured on the CLASS assessment		20%			
Staff's understanding of the practices measures on the ERS assessment		19%			
Teacher-child ratios	5%	19%			
Curriculum practices	14%	8%			
Child assessment practices	12%	6%			
Administrative other	3%	4%			
Other	21%	9%			

Source: Child Trends' Director and Teacher surveys

Reported benefits and challenges of assessment tools

Directors and teachers were asked about the benefits and challenges of the ERS and CLASS. Both groups reported the main benefits of the ERS were that staff can easily make improvements or changes to achieve a higher ERS score (68% directors, and 57% teachers), and staff see a clear connection between the scale and classroom quality (49% directors, and 52% teachers). Neither directors nor teachers consistently reported any top challenges to the ERS. About a quarter of teachers and directors felt that the ERS does not reflect their program's cultural practices (see Table 56 for additional detail).

Table 56. Quality First director and teacher perceptions of the top two benefits of the ERS						
Benefits of the ERS observational tool	Directors	Teachers				
	(n = 362)	(n = 616)				
My staff/I am able to easily make improvements or changes to help our program achieve a higher ERS score	68%	57%				
My staff/I see a clear connection between what the scales measure and classroom quality	49%	52%				
The scales are easy for my staff/me to understand	38%	35%				
The ERS reflects our program's cultural practices	20%	20%				
I don't know, I'm not very familiar with this observational assessment		23%				
Other, please describe	12%	12%				

Data Source: Quality First Director and Teacher surveys

⁻⁻ indicates that the response was not an option for the survey question

⁻⁻ indicates that the response was not an option for the survey question

Table 57. Quality First director and teacher perceptions of the challenges experienced with the ERS						
Challenges experienced with the ERS observational tool	Directors	Teachers				
	(n = 310)	(n = 562)				
My staff/I cannot easily make the improvements or changes that would allow our program to achieve a higher ERS score	32%	39%				
The scales do not reflect my program's cultural practices	34%	35%				
My staff/I do not understand the relationship between what the scales measure and classroom quality	34%	31%				
The scales are difficult for my staff/me to understand	34%	27%				
I don't know, I'm not very familiar with this observational assessment		36%				
Other, please describe	31%	31%				

Data Source: Quality First Director and Teacher surveys

When asked about benefits of the CLASS, both teachers and directors from 3-, 4-, and 5-star programs reported seeing a clear connection between each of the CLASS elements and quality interactions with children. The main challenges of the CLASS reported by directors included some elements being difficult for staff to understand (47%), and not understanding how the elements relate to quality interactions (32%). Teachers reported similar challenges with the CLASS as well.

To what extent do programs' Quality First star ratings change when alternative cutoffs are employed?

The previous section described how some quality element scoring criteria are more challenging to reach than others and, as a result, prevent programs from attaining higher star ratings. To explore this issue in more depth, we examined the extent to which changing quality element cutoff scores would result in programs moving up to the next star rating. For these analyses, alternative cutoff scores were only examined for the QFPS domains and the QFPS total score. The ERS and CLASS alternative cutoff scores were not examined. Although lower cutoff scores for the CLASS and ERS would likely result in more programs receiving a higher rating, this would mean that programs receiving low scores on the ERS and CLASS—as defined by the ERS and the CLASS developers—would then be attaining what FTF considers a quality star level (3-star or higher), which we would not recommend from a program quality perspective.

The Quality First star rating structure outlines two types of QFPS requirements for programs to attain each star level. Programs must meet a minimum score for each of the individual QFPS domains (Staff Qualifications, Administrative Practices, Curriculum and Assessment), as well as a minimum QFPS total score when the individual element scores are summed. We conducted analyses to explore the extent to which changing and lowering each of these requirements would result in programs receiving the next star level.

The alternative approaches were determined by identifying all possible changes that could be made to the QFPS based on the current requirements. First, we examined changes in programs' star ratings when using alternative cutoffs for the QFPS total, while leaving the domain minimums in place. In the original rating structure, 3-, 4-, and 5- star programs were required to meet a minimum of 6, 10, and 12 QFPS points, respectively. The proposed alternative structure reduced the total QFPS requirements for 4- and 5-star programs by 2 points, requiring programs to meet a minimum of 8 and 10 QFPS points, respectively. Results indicated that when reducing the cutoff for the QFPS total score for 4- and 5-star

⁻⁻ indicates that the response was not an option for the survey question

programs, seven 3-star programs (2%) moved to a 4-star rating (see Figure 23). However, the alternative cutoff did not result in any changes for 4-star programs moving up to a 5-star rating.

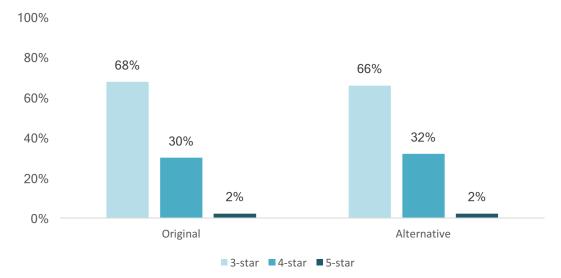


Figure 23. Percent of programs by star rating when using alternative QFPS total score cutoffs

Source: Quality First administrative data, 2016

Next, we examined changes in programs' star ratings when eliminating the minimum score requirements within each of the individual QFPS domains while leaving the total score minimum in place. In this alternative rating method 3-, 4-, and 5-star programs were only required to meet the original minimum total QFPS score of 6, 10, and 12 QFPS points, respectively. Findings indicated that eliminating the minimum requirements across QFPS domains resulted in two 3 -star programs (1%) moving to a 4-star rating and two 4-star programs (1%) moving to a 5-star rating (see Figure 24).

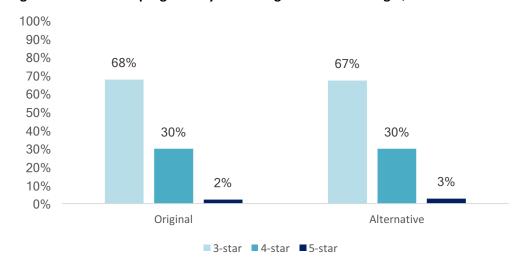


Figure 24. Percent of programs by star rating when eliminating QFPS domain cutoffs

Source: Quality First administrative data, 2016

Last, we examined changes in programs' star ratings when combining the two previous alternative rating methods (eliminating the minimum score requirements within each of the individual QFPS domains and reducing the minimum total QFPS cutoff scores). In this alternative scoring method 3-, 4-, and 5-star programs were only required to meet the alternative minimum total QFPS score of 6, 8, and 10 QFPS points, respectively. Findings indicated that eliminating the minimum requirements across QFPS domains and reducing the cutoffs for the total QFPS score resulted in seven 3-star programs (2%) moving to a 4-star rating and three 4-star programs (1%) moving to a 5-star rating (see Figure 25).

100%

80%
68%
66%
60%
40%
20%
Original

Original

Alternative

Figure 25. Percent of programs by star rating when eliminating QFPS domain cutoffs and reducing total QFPS cutoffs requirements

Source: Quality First administrative data, 2016

Overall, reducing or changing the QFPS cutoffs and rating methods requirements resulted in very few programs receiving a higher star rating. These analyses suggest that changing the QFPS cutoffs would likely yield few changes in the distribution of programs across star ratings.

To what extent does the overall Quality First star rating accurately reflect differences in an independent measure of observed quality (ECERS-3)?

An important validation question posed in QRIS research is whether QRIS levels can effectively distinguish between varying levels of observed quality, using an independent measure of quality as an assessment tool. The underlying assumption is that if QRIS levels are accurately distinguishing between levels of quality, then higher-rated programs should score higher on a measure of quality that is not used in Quality First to determine the rating than lower rated programs. To address this validation question, Child Trends used the ECERS-3 as an independent measure of quality, as it is not part of the Quality First star rating. The ECERS-3 was administered in 185 Quality First programs as part of this validation study. As a reminder, the ECERS-3 assessment tool is only for preschool-aged center-based programs, so these analyses do not include family child care or infant/toddler classrooms.

The association between Quality First quality levels low (1- and 2-star), medium (3-star), and high (4- and 5-star) and ECERS-3 scores were examined. ECERS-3 total scores by quality level are presented in Figure 26. Generally, higher ECERS-3 scores were observed at higher star rating levels. ECERS-3 scores among the highest (4- and 5-star) rated programs were significantly higher than those from the mid (3) and lowest (1- and 2- star) rating levels. ⁹⁰ However, the difference in ECERS-3 scores between the lowand mid-star rating levels was not significant. These results indicate that Quality First star rating levels do generally distinguish between programs that have higher and lower observed classroom quality; however, observed quality in the low- and medium-range star levels may be less distinct.

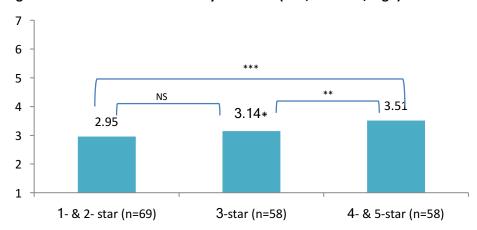


Figure 26. Mean ECERS-3 scores by star level (low, medium, high)

Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant.

Source: Child Trends classroom observation data collection, 2016

How are programs' Quality First star ratings changing over time?

We next describe how programs' star ratings changed from their previous star rating cycle to their current star rating cycle. Identifying the patterns of change over time (improvement, no change, decline) is useful for understanding whether most programs are improving and can help identify areas of need. Analyses were conducted using all programs that had a current rating and at least one previous rating (n = 781). The following section describes changes in star ratings between programs' current and previous ratings, changing the percentage of programs that reached 3-, 4-, or 5-star levels over time, and star rating movement patterns by program characteristics.

Most fully enrolled Quality First programs (85%) had at least two star ratings. The time between ratings varied from 12 months to 43 months.⁹¹ However, most programs received their current rating within 24 months of their previous rating (see Table 58).

Table 58. Time between the two most recent star ratings					
Time between star ratings Percent of programs (n)					
0-12 months	3% (27)				
13-24 months	64% (503)				

 $^{^{90}}$ F(2,182) = 8.60, p < .001

⁹¹ One program reported being re-rated at 9 months.

Table 58. Time between the two most recent star ratings					
Time between star ratings Percent of programs (n)					
25-36 months	28% (222)				
37-48 months	4% (29)				

Source: Quality First administrative data, 2016

Next, we examined how programs' ratings changed over time. Table 59 is a crosstabulation showing how programs' ratings changed over time, from their previous rating cycle (rows) to their current rating cycle (columns). The majority of programs had a star rating that either remained the same (38%) or increased by one star rating (53%). A small percentage of programs (9%) decreased their star rating.

Table 59. Star rating crosstabulation across programs' current and previous rating cycles



Source: Quality First administrative data, 2016

Figure 27 shows the amount of star rating change made by programs from the previous cycle to the current cycle. The most common change was a one star rating increase (40%). Few programs increased by two or more stars (13%). Similarly, few programs decreased by one (9%) or two stars (1%).

38% 40% 11% 2% -2 stars... -1 star... No change... +1 star... +2 stars... +3 stars...

Figure 27. Star rating change across programs' two most recent rating cycles

Source: Quality First administrative data, 2016

Programs' star rating changes were further assessed to determine whether programs were moving from star rating levels considered to be working toward quality (1- and 2-stars) to star rating levels considered to be meeting quality (3-, 4-, and 5-stars). As shown in Figure 28, in the previous rating cycle, most programs (67%) were considered to be working toward quality, falling into the 1- or 2-star rating levels; however, by the current rating cycle, this pattern had reversed and most programs fell into a star rating level considered to be meeting quality standards (3-5 stars).



Approaching Quality (1-2 stars)

Figure 28. Programs' star rating movement towards quality star rating levels

Source: Quality First administrative data, 2016

Star rating movement by program characteristics

Changes in star ratings over time were also assessed to determine whether the patterns of star rating movements were similar or different across program subgroups. Figure 29 shows star rating changes for center-based and family child care (FCC) programs. Centers and FCCs show similar patterns in star rating movement, with over a third of center-based (37%) and FCC (40%) programs showing no change in rating. However, centers were more likely to increase their rating by one or more stars (54%), compared to FCCs (46%). Still, both centers and FCCs demonstrated increases in the percentage of programs moving from star rating levels considered to be working toward quality (1- and 2-stars) to star rating levels considered to be meeting or exceeding quality standards or higher (3-, 4-, and 5-stars). In their previous ratings, 31% of centers were meeting or exceeding quality, compared to 69% of centers in the most recent set of ratings. Similarly, 45% of FCCs were meeting or exceeding quality standards in their previous rating cycle, compared to 67% in the current set of ratings.

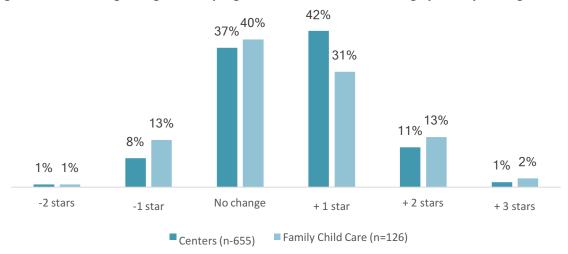


Figure 29. Star rating change across programs' two most recent rating cycles, by setting

Source: Quality First administrative data, 2016

As shown in Figure 30, tribal and non-tribal programs show star rating movement patterns that are similar to those observed across all Quality First programs in this sample. Most programs, regardless of tribal status, showed no change in their star rating or increased by one star rating level. However, no tribal programs decreased in star rating since their last rating cycle. Both tribal and non-tribal programs also demonstrated a substantial increase in the percentage of programs moving from star rating levels considered to be working toward quality (1- and 2-stars) to star rating levels considered to be meeting quality standards or higher (3-, 4-, and 5-stars). This was especially true for the small subset of tribal programs (n = 38). In their previous ratings, only 5% of tribal programs met or exceeded quality standards; however, in the current ratings almost two thirds of tribal programs (63%) met or exceeded quality standards. Similarly, in programs' previous ratings, about a third of non-tribal programs (34%) met or exceeded standards, but this number increased to over two thirds of non-tribal (69%) in the programs' most recent ratings.

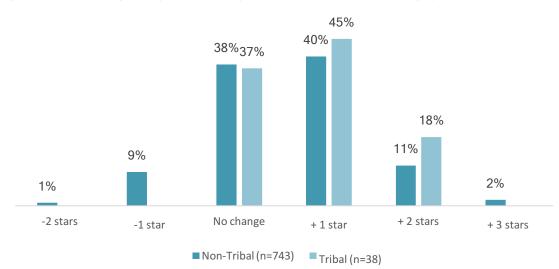


Figure 30. Star rating change across programs' two most recent rating cycles, by tribal status

Source: Quality First administrative data, 2016

Next, we examined star rating changes for urban and rural programs. As shown in Figure 31, the star rating movement pattern in urban programs was similar to the pattern observed across all Quality First programs; however, the pattern for the small subset of rural programs (n = 65) was somewhat different. Although most programs, regardless of geographic location, either showed no change in their star rating or increased by one star rating level, almost a quarter of rural programs (23%) increased their rating by two-star rating levels. Like other program types, both urban and rural programs also demonstrated an increase in the percentage of programs moving from star rating levels considered to be approaching quality (1- and 2-stars) to star rating levels considered to be meeting quality standards or higher (3-, 4-, and 5-stars). In their previous ratings, about a third of urban (32%) and rural (32%) programs met or exceeded quality standards and, in the current ratings, about two thirds of urban (69%) and rural (68%) programs exceeded quality standards.

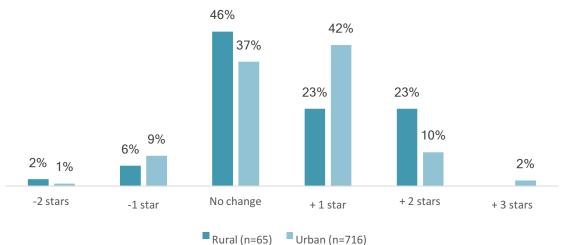


Figure 31. Star rating change across programs' two most recent rating cycles, by geographic location

Source: Quality First administrative data, 2016

Summary

In this chapter, we present the major findings from the Quality First validation study. For this study, we sought to answer three main research questions about the Quality First rating scale, its quality elements, and the ratings it produces. First, how does the distribution of the Quality First star levels vary by program type and by ratings? Second, what are the relationships between the quality elements that make up the Quality First rating scale? Are there some quality elements that are more challenging than others for programs to achieve? Third, to what extent is the Quality First rating scale assessing program quality in expected ways?

The majority of Quality First program were between 2- and 4-star rating levels. When examining the number of programs at each star level, 94% of Quality First programs were rated between a 2- to 4-star. This distribution of ratings, with few programs at the 1 or 5 star levels, held up within different types of programs, such as center versus family child care programs, rural and urban programs, and tribal programs.

The quality elements that are part of the Quality First rating scale were associated with one another in expected ways. When examining the different quality elements (i.e., the seven domains that make up the three assessment tools: ERS, CLASS and QFPS), Quality First programs scored higher on the CLASS Emotional Support and Classroom Organization elements than on Instructional Support. This is a common pattern seen across most studies that use CLASS. Additionally, on the QFPS, programs received the most points on Administrative Practices, compared to Staff Qualifications and Curriculum and Assessment. Furthermore, statistical analyses indicated that the quality elements were measuring similar aspects of quality. This included significant associations between elements across different assessment tools, like the ERS and QFPS. CLASS Instructional Support, however, was not correlated with the QFPS Staff Qualifications or Administrative Practices.

Higher rating star levels were generally associated with higher scores on the various quality elements, with patterns generally holding for both family child care and center-based programs. Quality First is made up of several quality elements, each weighing differently in the final rating. Additionally, some quality elements (CLASS and QFPS) are measured only at the 3-, 4-, and 5-star levels; whereas ERS is measured at all levels. Thus, we would expect that each element would be related to the final star rating, but given the complex way they are combined it is important to confirm this empirically.

This study found differences in CLASS scores by star rating level (low: 1- and 2-star, medium: 3-star, and high: 4- and 5-star) for Quality First programs, with higher rated programs scoring significantly higher in the CLASS Emotional Support (ES) and Classroom Organization (CO) domains. Small, unexpected differences were noted for the CLASS Instructional Support (IS) domain, such that the mean scores for programs with a medium star rating level were significantly lower than low star level programs (though high star level programs scored significantly higher than medium and low star level programs as predicted). When the data were disaggregated by program type (i.e., center-based and family child care), similar trends were found, although the differences between low and medium star level programs were not significant. In family child care homes, there were also no significant differences between low and high star level programs. These findings suggest that instructional support quality is similar at these star rating levels, or may be slightly higher at the lower star rating level compared to the medium level. However, it is important to remember that CLASS data for 1- and 2-star rated programs were collected by Child Trends, and CLASS data for higher rated programs were collected by First Things First. Thus, these findings must be interpreted with caution as they could be explained by different data collection

teams, data collection taking place at different times of year, or Quality First Supports received by programs prior to being assessed by Child Trends.

On the Environment Rating Scale (ERS) scores, significant differences were found between low, medium and high star rating levels for the ERS, indicating that higher star rating levels were associated with higher ERS means scores. The pattern held for both family child care and center-based programs.

Lastly, the third quality element of the Quality First rating scale, the QFPS was analyzed to confirm that QFPS scores were different at different levels of quality. In general, higher star rating levels were associated with higher QFPS scores, and the average QFPS scores were found to be significantly different between all three of the star level groups (low, medium, and high). While significant differences among all 3 of the star level groups were found in center-based programs, for family child care programs significant differences were found between low star rated programs and medium to high level programs, but no significant differences were found between medium and high level programs' QFPS scores.

Lower rated Quality First programs (1- and 2-star) may be able to meet some of the criteria required for QFPS domains at higher star levels (3-, 4-, and 5-star). Using director and survey data from 1- and 2star programs, we explored how these programs might be meeting specific requirements and criteria on the Quality First Points Scale (QFPS). Overall the majority of 1- and 2-star survey respondents reported already meeting the QFPS requirements at the 3- and 4-star levels for Years of Experience (Staff Qualifications) and Ratios (Administrative Practices). One third to about half of the 1- and 2-star survey respondents met the 3- and 4-star QFPS requirements for Educational Attainment (Staff Qualifications), Staff Retention (Administrative Practices), and Assessment processes (Curriculum and Assessment). Additionally, most survey respondents might be able to meet the 5-star level requirements for Curriculum and Assessment, while about half might be able to meet the 5-star requirements on Staff Retention (Administrative Practices). These findings indicate that there may be some QFPS components that are already being met by many Quality First programs, including those at lower star levels. These results should be interpreted with caution, however, as data were analyzed only for those who chose to respond to the surveys, and therefore we cannot make a direct comparison of the survey data to the QFPS. However, these findings may help First Things First better understand what requirements lower rated programs may be able to meet.

The scoring criteria required to meet CLASS and QFPS cutoffs appear to be challenging for 2-star programs to meet, while the ERS and CLASS scoring criteria appear to be challenging for 3- and 4-star programs to meet. This study examined whether there were some quality elements that make up a Quality First rating that had scoring criteria that were more challenging for programs, thus making it more difficult to achieve a higher star rating. By examining how programs score relative to the cutoff scores for the next higher star level on the Quality First rating scale, we gained insights into those aspects that prove to be challenging to programs. For 2-star programs, the scoring criteria for the ERS and the QFPS Staff Qualifications and Curriculum and Assessment elements appear to be difficult for programs in reaching the 3-star level. The picture is a little different for 3-star programs. For these programs, the ERS and the CLASS Instructional Support scoring requirements were challenging for a large portion of 3-star programs in reaching a 4-star rating. The QFPS total points requirement was also difficult for many programs from moving to a 4-star rating, although no one element of the QFPS proved more difficult than others. The same trend was found when looking at 4-star programs' scores compared to 5-star requirements. The examination of how programs score relative to the cutoff points for the next higher star level demonstrates how the distribution of programs across ratings falls out, as

well as how it could be altered. For example, more 2-star programs would receive 3-stars if the QFPS cut-off was based on total points, rather than having to attain a certain number of points on each part. However, that would also mean that a program could, for example, compensate for having lower Staff Qualifications by improving Administrative Practices, and such trade-offs might not meet Arizona's other goals for Quality First. Similarly, although more 3-star programs would attain 4-stars if ERS cutoffs were lowered, Arizona should think carefully about labeling programs as *quality* despite having scoring below a 4.0. The ERS authors refer to a 5.0 as *good* and a 3.0 as *minimal* quality.

The Quality First rating scale is differentiating between levels of observed quality. To evaluate if the Quality First rating scale is differentiating between levels of observed quality, Child Trends used the ECERS-3, which is not part of the Quality First rating scale, as an independent measure of quality. Overall, higher ECERS-3 scores were observed at higher star rating levels. ECERS-3 scores were significantly higher in higher rated programs (4- and 5-star) than in medium (3-star) and low star (1- and 2-star) rated programs. However, the difference between medium and low star rated programs was not statistically significant. Therefore, these findings provide evidence that the Quality First rating scale is distinguishing between high and low quality levels, but less-clear differences are found between low and medium levels of quality. It will be important to collect similar data in the future to check on whether and how patterns of scoring on observed quality measures among programs at the 1- and 2-star rating levels are differentiated relative to programs at the 3-star rating levels.

Quality First programs tend to increase in their ratings over time, with over half of programs moving up to quality levels. To examine how programs' ratings are changing over time, ratings data from the current and previous rating cycles were analyzed. In general, a little over half of all programs increased in their star ratings from one cycle to the next, mostly by one star rating level. In addition, the majority of programs that moved up increased from working toward quality levels (1- and 2-star), to quality levels (3-, 4-, and 5-star), indicating that they are making the necessary improvements needed to reach quality levels. This trend was also seen when examining program characteristics (program type, geographic location, and tribal status).

Limitations of available data

Several limitations of the data available for analyses should be noted. First, the ECERS-3, which was used as an independent measure of quality, can only be used for preschool-aged, center-based classrooms, so the study did not have an independent measure of quality in toddler classrooms or family child care homes. Additionally, the ECERS-3 was designed using the ECERS-R as a blueprint which is part of the Quality First rating. Second, the CLASS data in this chapter come from a combination of data collected by First Things First (3- through 5- star) and Child Trends (1- and 2- star). Given that the First Things First and Child Trends raters were not trained together, and that the ratings were done at different times, it is possible that program scores are at least partially affected by this difference. Third, the study participation rate was lower than desired, with just under one-third of programs participating. Although the programs that did participate were similar to the overall population of Quality First rated programs in many characteristics, there may be other unobserved differences. Between the spring of 2016 and when data collection concluded in the fall of 2016, 66 programs withdrew from the study between the time they were recruited until when they were contacted to schedule an observation. Yet, even with the withdrawal of programs, we are confident that the data collection strategy provides a solid sample on which we can draw conclusions. Fourth, participation was especially low in tribal programs, despite targeted efforts to include those programs. Only three tribal programs took part in the external classroom observations conducted by Child Trends, so while they are included in the current analyses,

this group was not large enough to analyze separately. Last, while we engaged in specific targeted outreach strategies to 1- and 2-star level programs for the director and teacher surveys, our survey response rate for those programs remained lower than our targets.

Findings from validation studies of QRIS ratings in other states

Comparisons among findings from validation studies of QRIS ratings in different states should be made cautiously because of the wide variability in rating structure and indicators from state to state in QRIS. However, we think it is helpful to briefly review the other research addressing rating scale design and functioning, to help Arizona understand its findings in the larger national context of validation studies examining QRIS ratings. In a review of QRIS validation studies, Karoly reported that 7 of 7 studies conducted prior to 2012 found positive relationships between ratings and independent measures of quality. More recently, of the six other Early Learning Challenge QRIS validation studies that have published findings to date—California, Delaware, Minnesota, Oregon, Rhode Island, and Wisconsin—all have reported statistically significant relationships between ratings and an independent measure of quality in centers, though in most cases, the differences in observed quality between QRIS levels are small. Thus, across states—including Arizona—evidence shows that QRIS ratings are generally working as intended to differentiate levels of quality, and Arizona's findings are consistent with those from many other states. This is encouraging because it shows that these systems can be meaningful and that states are on the right track in finding ways to distinguish levels of quality.

That said, as the science of early care and education progresses and quality measurement continues to improve, it will be important to strengthen QRIS ratings to further differentiate the practices and features that distinguish higher and lower quality programs. These distinctions will help target improvement supports and clarify features that parents can seek in their search for early care and education. In addition, it is important to acknowledge that ratings are one part of a larger system. Comprehensive evaluation, such as the work described in this report, is necessary for understanding how system components support programs through quality improvements that ultimately benefit children and families.

Conclusion

The findings in this report can be used to inform continuous improvement of Quality First. The findings from the review of the system design indicate ways to increase access to more specialized technical assistance, and provide additional training or professional development to participants on how to better interpret and use their assessment results. In addition, there are opportunities to strengthen Quality First's engagement and outreach to providers to support program participation. While data collection methods are thorough and strong, Quality First should provide more technical assistance to stakeholders covering why certain data is being collected and how it is used.

The validation study findings do not suggest major changes are needed to the Quality First rating scale, as it is functioning as expected in differentiating levels of quality. There is, however, a need for

⁹² Karoly et al., 2014

⁹³ Hawkinson et al., 2015, Karoly et al., 2016; Maxwell et al., 2016; Tout et al., 2016

additional quality improvement efforts to support Quality First participants in continuing to achieve higher ratings.	
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Appendix A: Data Tables

Select Data Tables for Chapter 1

Table A-1. Quality First director demographics by star level

Demographics	1 Star	2 Star	3 Star	4 Star	5 Star
Race/Ethnicity	(n = 3)	(n = 89)	(n = 85)	(n = 45)	(n = 15)
Black or African American	33%	17%	13%	9%	7%
White or Caucasian	100%	63%	54%	71%	67%
Asian or Pacific Islander	33%	7%	5%	7%	7%
Hispanic or Latino	67%	36%	36%	29%	20%
American Indian or Alaska Native	33%	12%	5%	2%	7%
Two or more races	0%	0%	9%	7%	0%
Other	0%	0%	1%	44%	7%
Highest education attained	(n = 3)	(n = 78)	(n = 72)	(n = 39)	(n = 13)
High School Diploma or GED	67%	40%	38%	15%	8%
Some college, but no degree	0%	3%	1%	0%	0%
Associate degree	0%	4%	4%	3%	0%
Associate degree in ECE or related field	0%	15%	10%	21%	0%
Bachelor's degree	33%	10%	10%	8%	15%
Bachelor's degree in ECE or related field	0%	13%	19%	15%	31%
Graduate degree	0%	6%	8%	10%	8%
Graduate degree in ECE or related field	0%	9%	10%	28%	38%
Credentials	(n = 3)	(n = 89)	(n = 85)	(n = 45)	(n = 15)
CDA	0%	20%	31%	2%	7%
AMI/AMS	0%	3%	1%	2%	0
State of Arizona Teaching Certificate in ECE	0%	6%	7%	13%	0%
State of Arizona Teaching Certificate in Early Childhood Special Education with ECE endorsement	0%	5%	6%	9%	0%
State of Arizona Teaching Certificate in Elementary Education with ECE endorsement	0%	11%	7%	16%	0%
Other	0%	22%	19%	20%	33%
Center Location	(n = 3)	(n = 89)	(n = 85)	(n = 45)	(n = 15)
Urban	100%	55%	53%	64%	73%
Rural	0%	37%	35%	27%	20%
Hybrid	0%	7%	12%	9%	7%
Unknown	0%	1%	0%	0%	0%
	_	_			

Data Source: Director survey and First Things First administrative data

Table A-2. Quality First director demographics within star level

	1 Star	2 Star	3 Star	4 Star	5 Star
Race/Ethnicity	(n = 0)	(n = 125)	(n = 179)	(n = 97)	(n = 29)
Black or African American (n=66)	0%	50%	35%	14%	2%
White or Caucasian (n=249)	0%	29%	39%	25%	7%
Asian or Pacific Islander (n=36)	0%	42%	31%	22%	6%
Hispanic or Latino (n=157)	0%	36%	41%	15%	7%
American Indian or Alaska Native (n=46)	0%	50%	33%	15%	2%
Two or more races (n=47)	0%	53%	34%	11%	2%
Other (n=9)	0%	33%	56%	11%	0%
Highest education attained	(n = 0)	(n = 113)	(n = 151)	(n = 81)	(n = 327)
High School Diploma or GED (n=9)	0%	78%	22%	0%	0%
Some college, but no degree (n=109)	0%	36%	46%	14%	5%
Associate degree (n=17)	0%	35%	35%	24%	6%
Associate degree in ECE or related field (n=47)	0%	34%	38%	23%	4%
Bachelor's degree (n=33)	0%	30%	39%	21%	9%
Bachelor's degree in ECE or related field (n=56)	0%	25%	45%	25%	5%
Graduate degree (n=40)	0%	28%	33%	33%	8%
Graduate degree in ECE or related field (n=61)	0%	16%	39%	28%	16%
Credentials	(n = 0)	(n = 66)	(n = 96)	(n = 49)	(n = 16)
CDA (n=85)	0%	28%	48%	13%	11%
AMI/AMS (n=8)	0%	13%	50%	38%	0%
State of Arizona Teaching Certificate in ECE (n-33)	0%	33%	33%	27%	6%
State of Arizona Teaching Certificate in Early Childhood Special Ed with ECE endorsement (n-24)	0%	8%	46%	33%	13%
State of Arizona Teaching Certificate in Elementary Ed with ECE endorsement (n=49)	0%	27%	41%	31%	2%
Other (n=95)	0%	27%	38%	27%	7%
Center Location	(n = 0)	(n = 123)	(n = 179)	(n = 97)	(n = 29)
Urban (n=244)	0%	30%	39%	23%	7%
Rural (n=119)	0%	27%	45%	21%	7%
Hybrid (n=44)	0%	18	50	25	7
Unknown (n=13)	0	62	38	23	7

Data Source: Director survey and First Things First administrative data

Table A-3. Teacher demographics by star level

	1 Star	2 Star	3 Star	4 Star	5 Star
Race/Ethnicity	(n = 4)	(n = 206)	(n =289)	(n = 165)	(n = 48)
Black or African American	25%	14%	9%	8%	2%
White or Caucasian	50%	56%	53%	62%	65%
Asian or Pacific Islander	0%	5%	4%	2%	4%
Hispanic or Latino	25%	26%	33%	27%	31%
American Indian or Alaska Native	0%	3%	5%	7%	0%
Two or more races	0%	2%	2%	1%	0%
Highest education attained	(n = 4)	(n = 206)	(n =289)	(n = 165)	(n = 48)

	1 Star	2 Star	3 Star	4 Star	5 Star
High School Diploma or GED	0%	21%	20%	5%	2%
Some college, but no degree	100%	42%	35%	34%	23%
Associate degree	0%	8%	8%	4%	4%
Associate degree in ECE or related field	0%	9%	11%	12%	19%
Bachelor's degree	0%	8%	9%	11%	10%
Bachelor's degree in ECE or related field	0%	7%	8%	18%	27%
Graduate degree	0%	1%	2%	7%	8%
Graduate degree in ECE or related field	0%	2%	6%	8%	6%
Credentials	(n = 4)	(n = 206)	(n =289)	(n = 165)	(n = 48)
CDA	0%	16%	19%	21%	25%
AMI/AMS	25%	1%	1%	1%	0%
State of Arizona Teaching Certificate in ECE	25%	6%	9%	10%	6%
State of Arizona Teaching Certificate in Early Childhood Special Ed with ECE endorsement	0%	0%	1%	8%	0%
State of Arizona Teaching Certificate in Elementary Ed with ECE endorsement	0%	3%	7%	15%	13%
None of the above	50%	67%	50%	46%	44%
Other	0%	7%	10%	13%	10%
Center Location	(n = 4)	(n = 206)	(n =289)	(n = 165)	(n = 48)
Urban	0%	74%	72%	60%	83%
Rural	0%	12%	11%	19%	6%
Hybrid	0%	4%	4%	12%	7%
Tribal	0%	0%	3%	4%	0%

Data Source: Teacher survey and First Things First administrative data

Table A-4. Teacher demographics within star level

	1 Star	2 Star	3 Star	4 Star	5 Star
Race/Ethnicity	(n =4)	(n = 205)	(n = 288)	(n = 164)	(n = 48)
Black or African American (n=69)	1%	41%	36%	19%	3%
White or Caucasian (n-405)	0%	29%	38%	25%	8%
Asian or Pacific Islander (n=29)	0%	38%	41%	14%	7%
Hispanic or Latino (n=209)	0%	25%	46%	21%	7%
American Indian or Alaska Native (n=32)	0%	19%	47%	34%	0%
Other (n=14)	0%	36%	50%	14%	0%
Highest education attained	(n=4)	(n=203)	(n=285)	(n=164)	(n=48)
High School Diploma or GED (n=110)	0%	39%	52%	8%	1%
Some college, but no degree (n=260)	2%	33%	39%	22%	4%
Associate degree (n=49)	0%	33%	49%	14%	4%
Associate degree in ECE or related field (n=78)	0%	23%	41%	24%	12%
Bachelor's degree (n=65)	0%	26%	38%	28%	8%
Bachelor's degree in ECE or related field (n=79)	0%	18%	28%	38%	16%
Graduate degree (n=25)	0%	12%	24%	48%	16%
Graduate degree in ECE or related field (n=38)	0%	13%	45%	34%	8%
Credentials	(n=4)	(n=198)	(n=280)	(n=162)	(n=46)
CDA (n=134)	0%	24%	42%	25%	9%
AMI/AMS (n=8)	13%	38%	38%	13%	0%

	1 Star	2 Star	3 Star	4 Star	5 Star
State of Arizona Teaching Certificate in ECE (n=60)	2%	22%	43%	28%	5%
State of Arizona Teaching Certificate in Early					
Childhood Special Ed with ECE endorsement (n=18)	0%	6%	22%	72%	0%
State of Arizona Teaching Certificate in Elementary					
Ed with ECE endorsement (n=55)	0%	11%	35%	44%	11%
None of the above (n=406)	0%	34%	42%	19%	5%
Other (n=71)	0%	20%	42%	31%	7%
Center Location	(n=0)	(n=194)	(n=264)	(n=156)	(n=46)
Urban (n=499)	0%	31%	41%	20%	8%
Rural (n=92)	0%	27%	35%	35%	3%
Hybrid (n=44)	0%	20%	30%	43%	7%
Unknown (n=9)	0%	67%	33%	0%	0%

Data Source: Teacher survey and First Things First administrative data

Table A-5. Region types served by TA provider

Region Types	Assessor	Assessor supervisor	ССНС	CCHC supervisor	Coach	Coaching supervisor	Other
	(n = 27)	(n = 7)	(n = 17)	(n = 1)	(n = 65)	(n = 10)	(n = 6)
Urban only	0%	0%	5%	0%	28%	0%	0%
Tribal only	0%	0%	0%	0%	3%	0%	0%
Rural only	0%	0%	24%	100%	22%	10%	17%
Urban & Tribal	0%	0%	0%	0%	0%	0%	0%
Urban & Rural	30%	0%	35%	0%	41%	40%	33%
Urban & Tribal	0%	0%	12%	0%	3%	10%	17%
Urban, Rural, & Tribal	70%	100%	24%	0%	3%	40%	33%

Data Source: Implementation survey and First Things First administrative data

Table A-6. Directors' anticipated star rating by analysis rating

	1 Star	2 Star	3 Star	4 Star	5 Star
	(n = 3)	(n = 83)	(n = 80)	(n = 43)	(n = 13)
Progressing Star (2 Star)	0%	11%	5%	1%	0%
Quality (3 Star)	0%	58%	42%	13%	0%
Quality Plus (4 Star)	0%	25%	46%	55%	22%
Highest Quality (5 Star)	0%	4%	5%	31%	70%
Other	0%	2%	2%	0%	7%

Data Source: Director survey and First Things First administrative data

Table A-7. Top two barriers to achieving a higher star rating

•		
	Director	Teacher
	(n = 406)	(n=639)
The ERS assessment score	19%	15%
The CLASS assessment score	39%	23%
Staff's understanding of the practices measures on the ERS assessment		19%

	Director	Teacher
	(n = 406)	(n=639)
Staff's understanding of the practices measured on the CLASS assessment	1	20%
Staff qualifications	39%	17%
Staff turnover	17%	24%
Teacher-Child ratios	5%	19%
Curriculum practices	14%	8%
Child Assessment practices	12%	6%
Administrative other	3%	4%
Other	2%	9%

Data Source: Director survey and First Things First administrative data

Table A-8. Top two barriers to achieving a higher star rating, directors by star rating

	1 Star	2 Star	3 Star	4 Star	5 Star
	(n = 0)	(n = 123)	(n = 170)	(n = 89)	(n = 15)
The ERS assessment score	0%	23%	19%	16%	17%
The CLASS assessment score	0%	38%	36%	42%	63%
Staff qualifications	0%	42%	41%	34%	29%
Staff retention	0%	18%	20%	15%	4%
Teacher-Child ratios	0%	8%	5%	4%	0%
Curriculum practices	0%	18%	11%	13%	13%
Child Assessment practices	0%	12%	14%	9%	13%
Administrative other	0%	4%	2%	3%	0%
Other	0%	20%	22%	24%	21%

Data Source: Director survey and First Things First administrative data

Table A-9. Top two barriers to achieving a higher star rating, teachers by star rating

	1 Star	2 Star	3 Star	4 Star	5 Star
	(n=2)	(n=180)	(n=258)	(n=154)	(n=45)
The ERS assessment score	0%	21%	12%	19%	2%
The CLASS assessment score	0%	22%	22%	29%	4%
Our staff's understanding of the practices measured on the ERS assessment	0%	22%	24%	15%	0%
Our staff's understanding of the practices measured on the CLASS assessment	0%	15%	23%	23%	9%
Staff qualifications	50%	21%	18%	12%	4%
Staff retention	50%	29%	27%	20%	4%
Teacher-Child ratios	50%	24%	21%	14%	7%

Curriculum practices	0%	9%	9%	5%	2%
Child Assessment practices	0%	7%	7%	6%	2%
Other administrative practices, please describe	0%	2%	6%	4%	2%
Other, please describe	0%	7%	7%	16%	2%

Data Source: Teacher survey and First Things First administrative data

Table A-10. Director observations by star rating

	1 Star	2 Star	3 Star	4 Star	5 Star
In your program's experience, what are the top two benefits of the ENVIRONMENT RATING SCALES?	(n = 0)	(n = 105)	(n = 151)	(n = 82)	(n = 24)
The scales are easy for my staff to understand	0%	40%	41%	30%	33%
My staff see a clear connection between what the scales measure and classroom quality	0%	48%	46%	56%	50%
My staff are able to easily make improvements or changes to help our program achieve a higher ERS score	0%	67%	67%	78%	50%
The scales reflect our program's cultural practices	0%	20%	21%	18%	21%
Other (please specify)	0%	14%	9%	9%	25%
What are the top two challenges your program experiences with the ENVIRONMENT RATING SCALES?	(n = 0)	(n = 101)	(n = 122)	(n = 69)	(n = 18)
The scales are difficult for my staff to understand	0%	41%	31%	33%	17%
My staff do not understand the relationship between what the scales measure and classroom quality	0%	34%	35%	35%	17%
My staff cannot easily make the improvements or changes that allow our program to achieve a higher score	0%	40%	33%	25%	6%
The scales do not reflect my program's cultural practices	0%	36%	35%	32%	28%
Other, please describe	0%	24%	26%	42%	67%
In your program's experience, what are the top two benefits of the CLASS OBSERVATIONAL TOOL?	(n = 0)	(n = 103)	(n = 142)	(n = 81)	(n = 26)
Most or all of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for my staff to understand	0%	50%	42%	33%	35%
My staff see a clear connection between what the dimensions measure and quality interactions with children	0%	46%	53%	63%	62%
My staff are able to easily make improvements or changes to help our program achieve a higher CLASS score	0%	41%	48%	52%	42%
The CLASS reflects our program's cultural practices	0%	19%	24%	22%	38%
Other, please describe	0%	17%	9%	10%	4%
What are the top two challenges your program experiences with the CLASS OBSERVATIONAL TOOL?	(n = 0)	(n = 93)	(n = 130)	(n = 71)	(n = 19)
Some of the dimensions (positive climate, negative climate, etc.) are difficult for my staff to understand	0%	32%	52%	58%	47%
My staff do not understand how what the dimensions measure relate to quality interactions with children	0%	40%	29%	31%	16%

	1 Star	2 Star	3 Star	4 Star	5 Star
My staff cannot easily make improvements or changes that would allow us to achieve a higher CLASS score	0%	34%	38%	25%	26%
The CLASS does not reflect our cultural practices	0%	32%	22%	20%	16%
Other, please describe	0%	28%	18%	28%	32%

Data Source: Director survey and First Things First administrative data

Table A-11. Teacher observations by star rating

In your program's experience, what are the top two benefits of the ENVIRONMENT RATING SCALES? 1.0		1 Star	2 Star	3 Star	4 Star	5 Star
Isee a clear connection between what the scales measure and classroom quality I am able to easily make improvements or changes to help our program achieve a higher ERS score The scales reflect our program's cultural practices O% 21% 20% 39% 24% I don't know, I'm not very familiar with this observational assessment Other, please specify O% 13% 12% 9% 12% What are the top two challenges your program experiences with the ENVIRONMENT RATING SCALES? The scales are difficult for me to understand I do not understand the relationship between what the scales measure and classroom quality I cannot easily make the improvements or changes that would allow our program to achieve a higher ERS score The scales do not reflect my program's cultural practices I don't know, I'm not very familiar with this observational assessment Other, please specify O% 25% 27% (n=130) (n=37) I don't know, I'm not very familiar with this observational assessment O% 38% 41% 42% 22% I don't know, I'm not very familiar with this observational assessment O% 25% 27% 42% 43% In your program's experience, what are the top two benefits of the CLASS OBSERVATIONAL TOOL? Most or all of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for me to understand I see a clear connection between what the dimensions measure and quality interactions with children I am able to easily make improvements or changes to help our program achieve a higher CLASS score The CLASS reflects our program's cultural practices O% 16% 13% 13% 16% 13% I don't know, I'm not very familiar with this observational assessment O% 23% 23% 13% 13% I don't know, I'm not very familiar with this observational assessment O% 16% 8% 8% 6% 8% 6% 3% 6% 6% 8%		(n=3)	(n=175)	(n=245)	(n=152)	(n=42)
measure and classroom quality I am able to easily make improvements or changes to help our program achieve a higher ERS score The scales reflect our program's cultural practices Oke 11% 20% 39% 24% I don't know, I'm not very familiar with this observational assessment Other, please specify What are the top two challenges your program experiences with the ENVIRONMENT RATING SCALES? The scales are difficult for me to understand I don't understand the relationship between what the scales measure and classroom quality I cannot easily make the improvements or changes that would allow our program to achieve a higher ERS score The scales do not reflect my program's cultural practices I don't know, I'm not very familiar with this observational assessment Oke 25% 27% 42% 43% In your program's experience, what are the top two benefits of the CLASS OBSERVATIONAL TOOL? Most or all of the dimensions (instructional support, poositive climate, negative climate, etc.) are easy for me to understand I see a clear connection between what the dimensions measure and quality interactions with children I am able to easily make improvements or changes to help our program achieve a higher CLASS score The CLASS reflects our program's cultural practices Oke 16% 13% 16% 13% 16% 13% 16% 13% 160 13% 15% 0bservational assessment Oke 23% 25% 27% 42% 40% 15% 15% 15% 15% 15% 15% 15% 15% 15% 15	The scales are easy for me to understand	33%	33%	35%	36%	36%
help our program achieve a higher ERS score The scales reflect our program's cultural practices I don't know, I'm not very familiar with this observational assessment 100% 25% 27% 14% 26% 100% 25% 27% 14% 26% 100% 13% 12% 9% 12% What are the top two challenges your program experiences with the ENVIRONMENT RATING SCALES? The scales are difficult for me to understand 1 do not understand the relationship between what the scales measure and classroom quality I cannot easily make the improvements or changes that would allow our program to achieve a higher ERS score The scales do not reflect my program's cultural practices 1 don't know, I'm not very familiar with this observational assessment 1 don't know, I'm not very familiar with this observational assessment 1 don't call of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for me to understand 1 see a clear connection between what the dimensions measure and quality interactions with children 1 am able to easily make improvements or changes to help our program achieve a higher CLASS score The CLASS reflects our program's cultural practices 1 don't know, I'm not very familiar with this observational support, positive climate, negative climate, etc.) are easy for me to understand 1 see a clear connection between what the dimensions measure and quality interactions with children 1 am able to easily make improvements or changes to help our program achieve a higher CLASS score The CLASS reflects our program's cultural practices 1 don't know, I'm not very familiar with this observational assessment 1 don't know, I'm not very familiar with this observational assessment 1 don't know, I'm not very familiar with this observational assessment 1 don't know, I'm not very familiar with this observational assessment 1 don't know, I'm not very familiar with this observational assessment 1 don't know, I'm not very familiar with this observational assessment		33%	54%	47%	59%	45%
I don't know, I'm not very familiar with this observational assessment100%25%27%14%26%Other, please specify0%13%12%9%12%What are the top two challenges your program experiences with the ENVIRONMENT RATING SCALES? The scales are difficult for me to understand(n=3)(n=165)(n=227)(n=130)(n=37)The scales are difficult for me to understand67%32%25%20%35%I do not understand the relationship between what the scales measure and classroom quality33%28%35%32%16%I cannot easily make the improvements or changes that would allow our program to achieve a higher ERS score0%38%41%42%22%The scales do not reflect my program's cultural practices0%37%33%38%35%I don't know, I'm not very familiar with this observational assessment100%39%36%25%46%Other, please specify0%25%27%42%43%In your program's experience, what are the top two benefits of the CLASS OBSERVATIONAL TOOL?(n=3)(n=168)(n=231)(n=144)(n=40)Most or all of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for me to understand33%43%53%53%63%I see a clear connection between what the dimensions measure and quality interactions with children0%49%50%59%68%I am able to easily make improvements or changes to help our program achieve a higher CLASS score0%16%		33%	53%	57%	63%	48%
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In your program's experience, what are the top two benefits of the CLASS OBSERVATIONAL TOOL? Most or all of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for me to understand I see a clear connection between what the dimensions measure and quality interactions with children I am able to easily make improvements or changes to help our program achieve a higher CLASS score The CLASS reflects our program's cultural practices I don't know, I'm not very familiar with this observational assessment Not applicable, my program does not receive this assessment (n=168) (n=231) (n=144) (n=40) (n=40) (n=40) (n=40)	· · · · · · · · · · · · · · · · · · ·	100%	39%	36%	25%	46%
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observational assessment 100% 23% 23% 13% 13% 13% Not applicable, my program does not receive this assessment 67% 15% 8% 6% 3%	The CLASS reflects our program's cultural practices	0%	16%	13%	16%	13%
assessment 6/% 15% 8% 6% 3%	•	100%	23%	23%	13%	13%
Other, please specify 0% 8% 9% 10% 3%		67%	15%	8%	6%	3%
	Other, please specify	0%	8%	9%	10%	3%

	1 Star	2 Star	3 Star	4 Star	5 Star
What are the top two challenges your program experiences with the CLASS OBSERVATIONAL TOOL?	(n=3)	(n=159)	(n=212)	(n=137)	(n=37)
Some of the dimensions (positive climate, negative climate, etc.) are difficult for me to understand	0%	38%	28%	45%	43%
I do not understand how what the dimensions measure relates to quality interactions with children	33%	28%	36%	36%	16%
I cannot easily make improvements or changes that would allow us to achieve a higher CLASS score	0%	33%	34%	32%	35%
The CLASS does not reflect our cultural practices	0%	30%	27%	28%	24%
I don't know, I'm not very familiar with this observational assessment	100%	38%	37%	23%	27%
Not applicable, my program does not receive this assessment	67%	15%	16%	7%	11%
Other, please specify	0%	18%	21%	28%	43%

Data Source: Teacher survey and First Things First administrative data

Select Data Tables for Goal 2

Table A-12. Frequency of Extranet data system use, by respondent type

	All Respondents	Assessor	ССНС	Coach
	(n = 114)	(n = 30)	(n = 15)	(n = 69)
Every day	52%	63%	47%	48%
Several times a week	39%	33%	40%	41%
Once a week	4%	3%	7%	4%
Several times a month	3%	0%	0%	4%
Other	3%	0%	7%	3%

Source: Child Trends survey and interview data, 2016

Table A-13. Top reasons for using the Extranet data system, for all survey respondents and by role

	Top Ranked Use	Second Ranked Use	Third Ranked Use
All Respondents (n = 107)	Enter/use data about program's technical assistance (n=52)	Complete on-going case management activities/tasks (n=49)	Enter/use data about programs' observational assessment (n=44)
Assessors (n=29)	Enter/use data about programs' observational assessment (n=18)	Enter data about programs' rating (n=9)	Complete on-going case management activities/tasks (n=8)
CCHCs (n=15)	Enter/use data about program's technical assistance (n=11)	Enter/use data about programs' observational assessment (n=8)	Complete on-going case management activities/tasks (n=5)

	Top Ranked Use	Second Ranked Use	Third Ranked Use
Coaches (n=63)	Enter/use data about program's technical assistance (n=36)	Enter/use data about program's technical assistance (n=36)	Review documents (n=21)

Source: Child Trends survey and interview data, 2016

Table A-14. Perceptions of the Extranet data system's ease of use, by respondent type

	All Respondents	Assessor	сснс	Coach
	(n = 113)	(n = 31)	(n = 16)	(n = 66)
Very Easy/Easy	88%	97%	88%	83%
Very Difficult/Difficult	12%	3%	13%	17%

Source: Child Trends survey and interview data, 2016

Table A-15. Perceptions of the Extranet's ability to make jobs easier, by respondent type

	All Respondents	Assessor	ССНС	Coach
	(n = 113)	(n = 31)	(n = 16)	(n = 66)
The Extranet makes my job easier.	55%	67%	69%	46%
The Extranet does <u>not</u> make my job easier.	15%	3%	13%	21%
Neutral	30%	30%	19%	33%

Source: Child Trends survey and interview data, 2016

Appendix B: Data Collection Protocols

- 1. Quality First Director Survey
- 2. Quality First Teacher Survey
- 3. Quality First Implementation Survey (TA Providers)
- 4. Arizona Early Care and Education Provider Survey (Non-Qualify First Participants)
- 5. Quality First Leadership Staff Interview
- 6. Technical Assistance Supervisor Interview
- 7. Regional Council Director Interview
- 8. Data System (Extranet) Key Informant Interviews Interview
- 9. Data System (Extranet) Focus Group Protocol
- 10. Data System (Extranet) Observation Protocol

Quality First Director Survey

Introduction

Dear Quality First Participant Director or Owner,

As you may have heard, with funding from First Things First, Child Trends is conducting a study to evaluate the Quality First Quality Improvement and Rating System. As a part of this study, we are surveying early care and education providers across the state who participate in Quality First. We would like to request your participation in a survey so we can better understand your program and your experience in Quality First.

This survey will ask about your experiences working in a Quality First program, your perceptions of the Quality First coaches, specialists, and other resources, as well as the benefits and challenges of Quality First. Your feedback will provide important information about how Quality First is working for participants.

Your individual responses and your program name will not be identified in any reports. Your name and program's name will not be identified to anyone outside of the Child Trends research team. Your responses will have no effect on you rating or your participation in Quality First.

The survey should take approximately 30 minutes to complete. All programs that complete the survey will be entered into a drawing for one of three \$100 Amazon gift cards as a token of our appreciation for your time.

Consent Information

Your participation is completely voluntary and you may stop completing this survey at any time. You may choose to skip any questions that you don't want to answer.

There is no direct benefit for participating in this study and completing the research activities. We hope that the information you provide may later benefit early care and education providers and Quality First. The risks associated with completing these research activities are minimal and include possible discomfort around answering questions directed to gain information about your feelings on your current employment and experiences with and impressions of Quality First.

If you have any questions about this study or the survey, please contact Danielle Hegseth at dhegseth@childtrends.org or (240) 223-9272. You may also contact the Institutional Review Board (IRB) via e-mail at irbparticipant@childtrends.org, by phone at (855) 288-3506, or by mail 7315 Wisconsin Ave., Suite 1200W, Bethesda, MD 20814. If you wish, you

We hope that you will take this opportunity to share your experience in Quality First. Thank you in advance for your time!
1) Do you agree to participate in this survey?*
() Yes
() No
Survey Tracking
2) For purposes of survey tracking <u>only</u> , please enter the name and Quality First ID of your early care and education program, as it's known in the Quality First system:*
Program name::
Quality First ID number::
Participant Information
3) Who is completing this survey?
() Owner
() Director/Assistant Director
() Corporate Regional Manager
() Teacher
() Other, please describe:
Participant Information
4) How long have you worked as a(n) [question("value"), id="10"] at this early care and education site?
() Less than 1 year
() 1-2 years
() 2-5 years

can also print or save a copy of this consent page for your records.

() 5-8 years
() 8-10 years
() Over 10 years
5) What is your program's regulatory agency? (Please select all that apply)
[] Arizona Department of Economic Security (DES)
[] Arizona Department of Health Services (DHS), Child Care Licensure
[] Tribal Board or Agency
[] Military Authority
[] Other, please describe:
6) Please estimate how much of the classroom instruction at your program is in Spanish
() More than 50% in Spanish
() An equal amount of Spanish and English
() Some but less than 50% in Spanish
() No instruction in Spanish
() It varies by classroom (please specify):
7) Do any classrooms at your program conduct instruction in a language other than Spanish or English?
() Yes
() No
() I don't know
8) Do any classrooms at your program conduct instruction in a language other than English?
() Yes
() No

() I don't know
9) Which other language(s)? (Please select all that apply)
[] Spanish Creole
[] Navajo
[] Other Native North American language(s)
[] German
[] Mandarin Chinese
[] Other, please describe:
10) Which other language(s)? (Please select all that apply)
[] Spanish Creole
[] Navajo
[] Other Native North American language(s)
[] German
[] Mandarin Chinese
[] Other, please describe:
11) What are the <u>TOPTWO</u> reasons your program decided to apply for participation in Quality First? (Please select up to two)
[] It is important for my professional development/professionalism
[] To be part of a state-wide early childhood quality initiative/program
[] Someone else in my organization or governing body required my program to participate
[] To access supports from a Quality First coach or program implementation specialist (e.g. mental health consultant, inclusion coach, etc.)
[] To better attract families to my program
[] To increase quality early care and education options for children in Arizona
[] To access cash incentives for program improvement
[] To access Quality First scholarships for children and families
[] To access licensing fee support

12) Including time spent as a teacher, assistant teacher, director, coordinator, or other professional, how many years have you worked with young children (birth to age 8)? () Less than 1 year () 1-2 years () 2-5 years () 2-5 years () 8-10 years () Over 10 years () Over 15 years () Over 20 years Staff Qualifications 13) Approximately what proportion of your teaching staff have been at your program for lessthan 6months? () 25% or less () Between 25-50% () Between 51-75% () 75% or more 14) Approximately what proportion of your teaching staff have been at your program between6and12months? () 25% or less () Between 51-75% () 75% or more () Other, please describe:	[] Other, please describe:
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15) What challenges, if any, does your program face in helping staff gain or achieve educational qualifications? (Please select all that apply)
[] A lack of available professional development or other education and training opportunities
[] A lack of financial resources available to access professional development or other education and training
[] A lack of time available to attend a class or training
[] My staff are not motivated to obtain additional educational qualifications
[] Our program does not have challenges with staff qualifications
[] Other, please describe:
16) Do you feel your program has an ongoing issue with staff retention?
() Yes, we experience regular turnover
() Sometimes, we have experienced a lot of turnover in the past, but not in the last year
() Not usually, we have not experienced much turnover in more than a year
() No, we rarely experience turnover
17) What would you say are the <u>TOPTWO</u> reasons for staff leaving your program? (Please select up to two)
[] Staff obtain a new degree or certificate that qualifies them to work elsewhere
[] Staff lack the necessary education requirements needed for our program
[] Staff are unhappy with our compensation and/or benefits
[] Staff aren't satisfied with the work schedule
[] Staff aren't satisfied with aspects of our workplace culture
[] I don't know
[] Other, please describe:
18) What do you think is the main reason your program does not face an issue with staff retention?
() Our Quality First financial incentives (e.g., cash assistance) allow our staff to receive bonuses or other compensation

() We have competitive compensation rates
() We have a positive workplace culture or environment
() Other, please describe:
19) How many <u>staff</u> (including directors, assistants, teachers, other classroom support staff, etc.) in your program have left in the last <u>2years</u> ?
20) How many <u>teachers</u> in your program have left in the last <u>3years</u> ?
Number of teachers::
-OR-
() I haven't been with the program long enough to know
Children Served
21) What is your program's licensed capacity or total number of allotted slots for each age group? (If you do not serve a particular age group, please leave that row blank)
Infants (0-11m):
Toddlers (12m-35m):
Preschoolers (36m-60m+):
School-Age (Kindergarten+):
Total (for DES certified home providers only):
22) How many children in your program speak a language other than English as their primary language at home (Dual Language Learners)? (If you do not serve a particular age group, please leave that row blank)
Infants (0-11m):
Toddlers (12m-35m):

lled to cover the program vailable to meet the needs staff to meet ratio standard ble meeting ratio standard	classroom or family child care program to meet ratio standards? (Please select all that
lled to cover the program vailable to meet the needs staff to meet ratio standard ble meeting ratio standard	to meet ratio standards? (Please select all that
lled to cover the program vailable to meet the needs staff to meet ratio standard ble meeting ratio standard	to meet ratio standards? (Please select all that
lled to cover the program vailable to meet the needs staff to meet ratio standard ble meeting ratio standard	to meet ratio standards? (Please select all that
lled to cover the program vailable to meet the needs staff to meet ratio standard ble meeting ratio standard	to meet ratio standards? (Please select all tha
lled to cover the program vailable to meet the needs staff to meet ratio standard ble meeting ratio standard	to meet ratio standards? (Please select all tha
lled to cover the program vailable to meet the needs staff to meet ratio standard ble meeting ratio standard	to meet ratio standards? (Please select all that
vailable to meet the needs	
staff to meet ratio standard	n's operating expenses
ble meeting ratio standard	s of my community (as evidenced by a waitlist
•	rds
	rds
el do you anticipate your	r program will receive <u>atthenext</u> rating?
t el d	o you anticipate you

() Highest Quality (5 Star)
() Other, please describe:
26) What do you feel are the TOP TWO barriers to your program achieving a higher star rating? (Please select up to two)
[] The ERS assessment score
[] The CLASS assessment score
[] Staff qualifications
[] Staff retention
[] Teacher-Child ratios
[] Curriculum practices
[] Child Assessment practices
[] Other administrative practices, please describe:
[] Other, please describe:
27) Who provides your program with quality improvement support? (Please select all that apply)
[] A Quality First Coach
[] A Child Care Health Consultant (CCHC)
[] A Quality First Assessor
[] Inclusion Specialist/Coach
[] Mental Health Consultant
[] None of the above
[] Other, please describe:
Quality Improvement
28) How long have you been working with your current Quality First Coach?
() Less than 6 months
() Less than 1 year

() More than 1 year but less than 2 years
() More than 2 years but less than 4 years
() 4 or more years
29) How frequently does your current Quality First Coach visit your program?
() Just one time when we started working together
() 1-2 times per month
() 3-4 times per month
() Monthly
() Quarterly
() Annually
() I don't know
() Never
() Other, please describe:
30) How long have you been working with your current Child Care Health Consultant (CCHC)?
(CCHC)?
(CCHC)? () Less than 6 months
(CCHC)? () Less than 6 months () Less than 1 year
(CCHC)? () Less than 6 months () Less than 1 year () More than 1 year but less than 2 years
(CCHC)? () Less than 6 months () Less than 1 year () More than 1 year but less than 2 years () More than 2 years but less than 4 years
(CCHC)? () Less than 6 months () Less than 1 year () More than 1 year but less than 2 years () More than 2 years but less than 4 years
(CCHC)? () Less than 6 months () Less than 1 year () More than 1 year but less than 2 years () More than 2 years but less than 4 years () 4 or more years 31) How frequently does your current Child Care Health Consultant (CCHC) visit your
(CCHC)? () Less than 6 months () Less than 1 year () More than 1 year but less than 2 years () More than 2 years but less than 4 years () 4 or more years 31) How frequently does your current Child Care Health Consultant (CCHC) visit your program?
(CCHC)? () Less than 6 months () Less than 1 year () More than 1 year but less than 2 years () More than 2 years but less than 4 years () 4 or more years 31) How frequently does your current Child Care Health Consultant (CCHC) visit your program? () Just one time when we started working together
(CCHC)? () Less than 6 months () Less than 1 year () More than 1 year but less than 2 years () More than 2 years but less than 4 years () 4 or more years 31) How frequently does your current Child Care Health Consultant (CCHC) visit your program? () Just one time when we started working together () 1-2 times per month

() Annually
() I don't know
() Never
() Other, please describe:
32) How long have you been working with your current Quality First Assessor?
() Less than 6 months
() Less than 1 year
() More than 1 year but less than 2 years
() More than 2 years but less than 4 years
() 4 or more years
33) How frequently does your current Quality First Assessor visit your program?
() Just one time when we started working together
() 1-2 times per month
() 3-4 times per month
() Monthly
() Quarterly
() Annually
() I don't know
() Never
() Other, please describe:
34) How long have you been working with your current Inclusion Specialist?
() Less than 6 months
() Less than 1 year
() More than 1 year but less than 2 years
() More than 2 years but less than 4 years
() 4 or more years

35) How frequently does your current Inclusion Specialist visit your program?
() Just one time when we started working together
() 1-2 times per month
() 3-4 times per month
() Monthly
() Quarterly
() Annually
() I don't know
() Never
() Other, please describe:
36) How long have you been working with your current Mental Health Consultant?
() Less than 6 months
() Less than 1 year
() More than 1 year but less than 2 years
() More than 2 years but less than 4 years
() 4 or more years
37) How frequently does your current Mental Health Consultant visit your program?
() Just one time when we started working together
() 1-2 times per month
() 3-4 times per month
() Monthly
() Quarterly
() Annually
() I don't know
() Never
() Other, please describe:

Quality First Coaching

38) Please estimate the average number of hours your Quality First Coach spends at your program during their onsite visits:
() Less than 1 hour
() About 1 hour
() Between 1 and 2 hours
() More than 2 hours
39) On average, how many times per month do you communicate with your Quality First Coach in other ways (phone, email, other)?
() None
() 1-2 times
() 3-5 times
() More than 5 times
40) What are the TOP THREE primary things you have worked on with your Quality First Coach? (Please select three)
[] Developing an understanding of the Quality First rating process and requirements
[] Setting goals for quality improvement in your program
[] Preparation for my ERS observations
[] Preparation for my CLASS observations
[] Ensuring the AZELS are clearly reflected in written activity plans and shared with families
[] Ensuring child assessment is an ongoing process and assess progress in all domains
[] Assembling the documentation packet for my rating
[] Picking out new materials or equipment for my program
[] Re-arranging the environment in my program
[] Getting my families more involved
[] Planning goals for training/education for yourself and/or your staff

[] Developing a Quality Improvement Plan
[] I did not work on anything with my Quality First Coach
Other, please describe:

41) Quality First Coaches may conduct different types of activities when working with your program. Please rate the level of usefulness for the following types of activities. If your program did not participate in a specific type of activity, please mark, "N/A".

	N/A	Not at all useful	Somewha t useful	Neutral	Useful	Very useful
A practice CLASS observation to prepare for a ratings visit or assessment	()	()	()	()	()	()
A practice Environmental Rating Scale (ERS) (i.e., ECERS, ITERS, FCCERS) observation to prepare for a ratings visit or assessment	()	()	()	()	()	()
A coaching visit where your Quality First Coach reviewed an ERS and/or CLASS feedback report	()	()	()	()	()	()
A coaching visit where your Quality First Coach supported the development and implementation of a new policy for your program	()	()	()	()	()	()
A coaching visit where your Quality First Coach worked directly with the program director or owner on a specific skill or implementing a new strategy	()	()	()	()	()	()

A coaching visit where your Quality First Coach worked directly with one or more teachers/ aides on a specific skill or implementing a new strategy	()	()	()	()	()	()
A coaching visit where your Quality First Coach worked with you and/or your staff to set goals for quality improvement and developed a Quality Improvement Plan.	()	()	()	()	()	()

Quality Improvement Plan

42) During an on-site visit, Quality First Coaches may have worked with program directors or owners to develop a Quality Improvement Plan (QIP).

Does your program have a QIP?
() Yes
() No
() I don't know
43) How frequently is the QIP discussed or addressed during onsite visits?
() All visits
() As needed
() Never
() Other, please describe:

44) Please rate the extent to which you agree with the following statements

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The development of the QIP was a collaborative process with my coach and staff.	()	()	()	()	()

The development of the QIP was a collaborative process with my coach and staff.	()	()	()	()	()
The goals set for my program will help me improve my Star-Rating.	()	()	()	()	()
My Coach provided guidance about how to access these resources and supports.	()	()	()	()	()
The QIP is directly related to the assessment results our program received.	()	()	()	()	()
Our program frequently refers to the QIP to guide our quality improvement efforts.	()	()	()	()	()
45) Name the <u>TWOmostsignificantbene</u> QIP? (Please select your top two)	efits you have	experienced a	ns a result of	using a	

[] The QIP helped our program advance our Star-Rating
[] The QIP and the process of working with a Coach helped our program achieve goals we had not been able to accomplish previously
[] The QIP helped foster positive relationships among staff
[] The QIP helped me to identify progress our program has made, and also has helped me to identify new goals or ideas I have about the future
[] Other, please describe
46) Name the <u>mostsignificantchallenge</u> you have faced in implementing your QIP?

Quality Improvement Supports

47) Please rate the extent to which you agree with the following statements

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My Quality First Coach answers my questions and concerns fully.	()	()	()	()	()
Working with my Quality First Coach is helpful in improving my program's quality.	()	()	()	()	()
The time on-site with my Quality First Coach is used efficiently.	()	()	()	()	()
My Quality First Coach's advice is appropriate and helpful to my program.	()	()	()	()	()
My Quality First Coach explains how to implement his/her advice within my program (individualizes/tailors their support for our program).	()	()	()	()	()

48) Which of the following types of specialized assistance has your program accessed through Quality First? (Please select all that apply)

[] Child Health Care Consultants	
[] Early Childhood Mental Health Consultation System (Smart Support)	
[] Early Care and Education Inclusion (ECEI+)	
[] Arizona Self-Study Project (ASSP)	
[] None of the above	
Other, please describe:	

49) Please select the Quality First incentives your program has received or purchased. (Please select all that apply)
[] Learning materials or equipment
[] Consultation or Specialized Services
[] Facility improvements (e.g., shelving, fencing, painting, carpeting)
[] Cover the costs of staff transcripts during Quality First Points Scale preparation process
[] Cover the cost of accreditation
[] Professional Development opportunities for staff
[] Quality First scholarships
[] Licensing fee assistance
[] Other, please describe:
[] We have not spent any of our Quality First incentive dollars yet

50) How helpful were the following Quality First supports to improving the quality of your program?

	Not Used	Not Very Helpful	Somewhat Helpful	Neutral	Helpful	Very Helpful
Quality First Coaching	()	()	()	()	()	()
Licensing Fee Assistance	()	()	()	()	()	()
Quality First incentives for purchasing classroom materials or equipment	()	()	()	()	()	()
Quality First Child Scholarships	()	()	()	()	()	()

The Feedback Report from the CLASS Observation	()	()	()	()	()	()
The Feedback Report from the ECERS-R Observation	()	()	()	()	()	()
The Feedback Report from the Quality First Points Scale Assessment	()	()	()	()	()	()
Arizona Early Childhood Career and Professional Network (website, Registry, career lattice, Arizona Workforce Knowledge and Competencies)	()	()	()	()	()	()
The Quality First Website (www.qualityfirstaz.com)	()	()	()	()	()	()
Early Childhood Mental Health Consultation System (Smart Support)	()	()	()	()	()	()
Early Care and Education Inclusion (ECEI+)	()	()	()	()	()	()
Arizona Self-Study Project (ASSP)	()	()	()	()	()	()

Program Quality Observational Tools

In the following questions, we are interested in learning more about your perceptions of observational tools such as the Environment Rating Scales (e.g., ECERS-R, ITERS-R, FCCERS-R) and the CLASS.

51) In your program's experience, what are the <u>TOPTWO</u> benefits of the Environment Rating Scales? (Please select two)

IJ	The scale	es are easy	/ for my	y staff to	understand
----	-----------	-------------	----------	------------	------------

[] My staff see a clear connection between what the scales measure and classroom quality
[] My staff are able to easily make improvements or changes to help our program achieve a higher ERS score
[] The scales reflect our program's cultural practices
[] Other (please specify):
52) What are the <u>TOPTWO</u> challenges your program experiences with the Environment Rating Scales? (Please select two)
[] The scales are difficult for my staff to understand
[] My staff do not understand the relationship between what the scales measure and classroom quality
[] My staff cannot easily make the improvements or changes that would allow our program to achieve a higher ERS score
[] The scales do not reflect my program's cultural practices
[] Other, please describe:
Program Quality Observational Tools
Program Quality Observational Tools 53) In your program's experience, what are the <u>TOPTWO</u> benefits of the CLASS observational tool? (Please select two)
53) In your program's experience, what are the <u>TOPTWO</u> benefits of the CLASS
53) In your program's experience, what are the <u>TOPTWO</u> benefits of the CLASS observational tool? (Please select two) [] Most or all of the dimensions (instructional support, positive climate, negative climate, etc.)
53) In your program's experience, what are the <u>TOPTWO</u> benefits of the CLASS observational tool? (Please select two) [] Most or all of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for my staff to understand [] My staff see a clear connection between what the dimensions measure and quality interactions with
53) In your program's experience, what are the <u>TOPTWO</u> benefits of the CLASS observational tool? (Please select two) [] Most or all of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for my staff to understand [] My staff see a clear connection between what the dimensions measure and quality interactions with children [] My staff are able to easily make improvements or changes to help our program achieve a higher
53) In your program's experience, what are the TOPTWO benefits of the CLASS observational tool? (Please select two) [] Most or all of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for my staff to understand [] My staff see a clear connection between what the dimensions measure and quality interactions with children [] My staff are able to easily make improvements or changes to help our program achieve a higher CLASS score
53) In your program's experience, what are the TOPTWO benefits of the CLASS observational tool? (Please select two) [] Most or all of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for my staff to understand [] My staff see a clear connection between what the dimensions measure and quality interactions with children [] My staff are able to easily make improvements or changes to help our program achieve a higher CLASS score [] The CLASS reflects our program's cultural practices

Curriculum and Assessment Practices

57) What type of training was provided or attended for [question("value"), id="114"]?

() Formal training sponsored by the develo	opers, authors, or publishers
--	-------------------------------

() A training that has been developed internally for new educators

() A brief overview, webinar, or presentation
() Required reading of the curriculum's manual
() Training provided by a mentor or coach
() Training is not required for this approach
() Training has not been provided
() Other, please describe:
58) Please estimate the percentage of the staff in your program who have received this infant and toddler curriculum training:
() All, 100%
() Almost all, 75% or more
() No staff have been formally trained on our curriculum
() About half, 50%
() Less than half, under 50%
() A few, about 25%
() Other (please describe):
Curriculum and Assessment Practices 59) Does your program currently follow a specific curriculum for preschoolers?
() Yes
() No
60) Please select the main or core curriculum your program uses for preschoolers
() Creative Curriculum for Preschool
() High/Scope for Preschoolers
() Opening the World of Learning (OWL)
() High Reach
() Core Knowledge
() Everyday mathematics

() My program uses an approach, such as Montessori or Project Approach			
() My program uses a locally developed curriculum – OR – a curriculum we have developed ourselves			
() Other curriculum for preschoolers, please describe:			
Curriculum and Assessment Practices			
61) What type of training was provided or attended for [question("value"), id="	'120"]?		
() Formal training sponsored by the developers, authors, or publishers			
() A training that has been developed internally for new educators			
() A brief overview, webinar, or presentation			
() Required reading of the curriculum's manual			
() Training provided by a mentor or coach			
() Training is not required for this approach			
() Training has not been provided			
() Other (please describe):			
62) Please estimate the percentage of the staff in your program who have receive preschool curriculum training:	ed this		
() All, 100%			
() Almost all, 75% or more			
() About half, 50%			
() Less than half, under 50%			
() A few, about 25%			
() No staff have been formally trained on our curriculum			
() Other (please describe):			

Curriculum and Assessment Practices

63) Please rate how often the Arizona Early Learning Standards (AZELS) are clearly reflected in your program's written activity/lesson plans (i.e., each lesson plan refers to or identifies at least one AZELS that will be addressed by the activity)

() Never
() Sometimes
() Most of the time
() Always
() I don't know
64) What challenge(s) does your teaching staff most commonly face when trying to incorporate the AZELS in your lesson plans?
65) Does your program have a written process for sharing curriculum with families (this is a statement or policy that describes how your program informs families of what their children are learning or identifies the curriculum used)?
() Yes
() No
66) What challenge(s) does your teaching staff most commonly face when sharing curriculum with families?
67) Does your program's written curriculum plans include specific learning objectives for children based on each child's documented or observed assessment information?
() Yes
() No
68) What challenge(s) does your teaching staff most commonly face when developing specific learning objectives based on assessment information?

69) Do your program's written curriculum plans allow for individual modifications based on a child's particular needs or skills?
() Yes
() No
70) What challenge(s) does your teaching staff most commonly face when developing modifications for individual children?
71) Does your program's written curriculum plans include strategies, modifications, and/or adaptations to fully involve children with special health or developmental needs?
() Yes
() No
72) What challenge(s) does your teaching staff most commonly face when developing strategies, modifications, and/or adaptations for children with special needs?
Curriculum and Assessment Practices
We are also interested in the processes that you use to assess the growth and progress children make over time in their learning and development. We define assessment as the gathering of information about children's development through a process of regular observation and using that information to guide instruction.
73) Does your program use a tool to conduct regular child assessments for infants and toddlers?
() Yes
() No

74) How often does your program collect child assessment data for infants and toddlers?
() Never
() Quarterly
() Monthly
() Weekly
() Daily
75) Please select the main or core assessment tool your program uses for infants and toddlers
() Creative Curriculum for Infants, Toddlers & Twos: Developmental Continuum Assessment Toolkit
() High/Scope Child Observation Record (COR) for Infants and Toddlers
() The Ounce Scale (developed for infants and toddlers)
() Ages and Stages Questionnaire (ASQ)
() Battelle Developmental Inventory (BDI)
() Other, please describe:
Curriculum and Assessment Practices 76) What type of training was provided or attended for [question("value"), id="136"]?
() Formal training sponsored by the developers, authors, or publishers
() A training that has been developed internally for new educators
() A brief overview, webinar, or presentation
() Required reading of the assessment tool's manual
() Training provided by a mentor or coach
() Training is not required for this assessment tool
() Training has not been provided
() Other, please describe:

77) Please estimate the percentage of the staff in your program who have received this infant and toddler assessment tool training:
() All, 100%
() Almost all, 75% or more
() About half, 50%
() Less than half, under 50%
() A few, about 25%
() No staff have been formally trained on our curriculum
() Other, please describe:
78) Does your program use a tool to conduct regular child assessments for preschoolers?
() Yes
() No
79) How often does your program collect child assessment data for preschoolers?
() Never
() Quarterly
() Monthly
() Weekly
() Daily
80) Please select the main or core assessment tool your program uses for preschoolers
() Creative Curriculum for Preschool: Developmental Continuum Assessment Tool for Ages 3 - 5
() Teaching Strategies GOLD TM
() High/Scope Preschool Child Observation Record (COR), Second Edition
() Work Sampling, Developmental Guidelines, Preschool 3
() Work Sampling, Developmental Guidelines, Preschool 4
() Ages and Stages Questionnaire (ASQ)

() Battelle Developmental Inventory (BDI)	
() Other, please describe:		
Curriculum and Assessment	Practices	
81) What type of training was provi	ded or attended for [question("value"), id="141"]?	
() Formal training sponsored by the de	evelopers, authors, or publishers	
() A training that has been developed	internally for new educators	
() A brief overview, webinar, or prese	entation	
() Required reading of the assessment	tool's manual	
() Training provided by a mentor or co	oach	
() Training is not required for this asso	essment tool	
() Training has not been provided		
() Other, please describe:		
82) Please estimate the percentage o preschool assessment tool training: () All, 100%	f the staff in your program who have received this	
() Almost all, 75% or more		
() About half, 50%		
() Less than half, under 50%		
() A few, about 25%		
() No staff have been formally trained	on our curriculum	
() Other, please describe:		
83) How often does your program sl program?	hare child assessment results with the families in your	
() Never		
() Annually		

() Quarterly

Monthly
Weekly
Daily
) How do your teachers use the results from child assessments? (Please select all that apply)
Plan large group activities/create lesson plans
Determine children's placement in groups
Plan small group activities
Create individualized learning plans for ALL children
Create individualized learning plans for SOME children
Collaborate with parents in designing goals for their child
Other, please describe:
) How often does your program offer parent/teacher conferences?
My program does not offer parent/teacher conferences on a regular basis
Once a year
Twice a year or more
Other, please describe:
Does your program provide or arrange for developmental screenings (e.g. vision, earing, etc.) for the children in your program?
Yes
No
Does your program provide or arrange for developmental screenings (e.g. vision, earing, etc.) for the children in your program? Yes

Perceptions of Quality First

87) What is your overall impression of Quality First as a tool and resource for improving your program's quality?

) Extremely negative					
) Somewhat negative					
) Neutral					
) Somewhat positive					
) Extremely positive					
38) Please indicate how strongly you agre	e or disagree	with the follo	wing stateme	ents	
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe my program is of higher quality because we joined Quality First.	()	()	()	()	()
My experience with Quality First has been what I expected.	()	()	()	()	()
I would recommend that other programs join Quality First.	()	()	()	()	()
We have made changes to our program as a result of joining Quality First.	()	()	()	()	()
39) What is the most beneficial aspect of p		_			
Demographics		_			
01) Which of the following best describes	your racial/et	hnic group? ((Please select	all that ap	ply)

[] White or Caucasian
[] Asian or Pacific Islander
[] Hispanic or Latino
[] American Indian or Alaska Native
[] Two or more races
[] Other, please describe:
92) What language(s) do you speak at home most often with family members? (Please select all that apply)
[] English
[] Spanish
[] Spanish Creole
[] Navajo
[] Other Native North American languages
[] German
[] Mandarin Chinese
[] Other, please describe:
[] English and another specified language EQUALLY, please specify other language:
[] Multiple other languages EQUALLY, please specify other languages:
93) What is the highest level of education you have attained?
() High School Diploma or GED
() Some college, but no degree
() Associate degree
() Associate degree in Early Childhood or related field
() Bachelor's Degree
() Bachelor's Degree in Early Childhood or related field
() Graduate Degree
() Graduate Degree in Early Childhood or related field

94) Which of the following credentials have you attained? (Please select all that apply)
[] CDA (Child Development Associate)
[] AMI/AMS Credential
[] State of Arizona Teaching Certificate in Early Childhood Education
[] State of Arizona Teaching Certificate in Early Childhood Special Education with ECE endorsement
[] State of Arizona Teaching Certificate in Elementary Education with ECE endorsement
[] Other, please describe:
Other Comments
95) Are there any other comments you would like to add about Quality First or your experience in Quality First?
Thank You!
Thank you for completing this survey! If you would like your program to be entered into the gift card drawing, please enter your name and email address below.
96) First name:
97) Email address:
Thank You!
Thank you for taking our survey!

Quality First Teacher Survey

Consent

Thank you for your time taking this survey! Your feedback will provide important information about how Quality First is working for participants. All teachers that complete the survey will be entered into a drawing for one of three \$100 Amazon gift cards as a token of our appreciation. Participation is voluntary. Your individual responses and your program name will not be identified in any reports.

The survey should take approximately 30 minutes and you can complete it in more than one sitting! To do so, click the "save and continue survey later" bar at the top of any page. The survey will ask you to provide an email address to save your progress. A unique link will then be emailed to you that will allow you to return to your survey where you left off.

If you have any questions about this study or the survey, please contact Danielle

Hegseth at dhegseth@childtrends.org or (240) 223-9272.
1) Do you agree to participate in this survey?*
() Yes
() No
About You
2) Which of the following best describes your current position?
() Lead Teacher
() Co-Lead Teacher
() Teacher
() Assistant Teacher
() Other, please specify::

Teaching Background

3) How long have you worked as a [Lead Teacher/Teacher/Co-Lead Teacher] at your center? Enter years and/or months.
Years:
Months:
4) Did you previously work at another site(s)/center(s) that participated in Quality First?
() Yes
() No
5) How long were you a teacher (at any level) at any Quality First site/center, prior to your current center?
Years:
Months:
6) Including time spent as a teacher, assistant teacher, director, coordinator, or other professional, how many years have you worked with young children (birth to age 8)?
Years:
Months:
Demographic Information
7) Which of the following best describes your racial/ethnic group? (Please select all that apply)
[] Black or African American
[] White or Caucasian
[] Asian or Pacific Islander

[] Hispanic or Latino								
[] American Indian or Alaska Native								
Other, please specify::								
8) What language(s) do you speak at home most often with family members? (Please select all that apply)								
[] English								
[] Spanish								
[] Navajo [] Other Native North American languages								
[] English and another specified language, please specify other language::								
] Multiple other languages, please specify other languages::								
My Education and Training								
9) What is the highest level of education you have attained?								
() High School Diploma or GED ()								
Some college, but no degree								
() Associate degree								
) Associate degree in Early Childhood or related field								
() Bachelor's Degree								
) Bachelor's Degree in Early Childhood or related field								
() Graduate Degree								
() Graduate Degree in Early Childhood or related field								

10) Do you have any of the following certificates or credentials? (Please select all that apply)								
[] CDA (Child Development Associate)								
[] AMI/AMS Credential								
[] State of Arizona Teaching Certificate in Early Childhood Education								
[] State of Arizona Teaching Certificate in Early Childhood Special Education with ECE endorsement								
[] State of Arizona Teaching Certificate in Elementary Education with ECE endorsement								
[] None of the above								
[] Other, please describe:								
11) Are you currently working on increasing or do you have plans to increase your educational qualifications?								
() Yes								
() No								
12) Which of the following educational qualifications are you working toward?								
() Associate degree								
() Associate degree in Early Childhood or related field								
() Bachelor's Degree								
() Bachelor's Degree in Early Childhood or related field								
() Graduate Degree								
() Graduate Degree in Early Childhood or related field								
() CDA (Child Development Associate)								
() AMI/AMS Credential								
() State of Arizona Teaching Certificate in Early Childhood Education								
() State of Arizona Teaching Certificate in Early Childhood Special Education with ECE endorsement								
() State of Arizona Teaching Certificate in Elementary Education with ECE endorsement								
() Other, please describe:								

13) What challenges, if any, do you face in increasing your educational qualifications? (Please select all that apply)								
[] A lack of available professional development or other education and training opportunities [] A lack of financial resources available to access professional development or other training								
								A lack of financial resources available to access educational degree programs A lack of time available to attend a class or training
A lack of transportation to get to classes or trainings								
[] I do not face any challenges gaining or achieving educational qualifications								
] I do not feel I need to attain any additional educational qualifications								
[] Other, please specify::								
About Your Classroom 14) What is the racial/ethnic makeup of the children in your classroom? Please provide an estimation of the percentage of students belonging to each racial/ethnic group:								
Black or African American								
White or Caucasian								
Asian or Pacific Islander								
Hispanic or Latino								
American Indian or Alaska Native								
Other								
15) Please estimate how much of your classroom instruction is in Spanish:								
() More than 50% in Spanish								
() More than 50% in Spanish () An equal amount of Spanish and English								
•								

Quality Improvement

16) Who provides you with quality improvement support? (Please select all that apply	y)
[] Quality First Coach	
[] Child Care Health Consultant (CCHC) []	
Quality First Assessor	
[] Inclusion Coach	
[] Mental Health Consultant	
[] Director or other administrative staff member	
[] None of the above	
[] Other, please specify::	
17) How long have you been working with your current [Coach/CCHC/Assessor/Inclu Coach/Mental Health Consultant/Director]?	ısion
() Less than 6 months	
() More than 6 months but less than 1 year	
() More than 1 year but less than 2 years	
() More than 2 years but less than 4 years	
() 4 or more years	
18) How frequently does your current [Coach/CCHC/Assessor/Inclusion Coach/Ment Health Consultant] visit your classroom?	al
() Just one time when we started working together	
() 1-2 times per month	
() 3-4 times per month	
() Quarterly	
() Annually	
() I don't know	
() Never	

() Other, please specify::						
Quality Improvement: Coaching Support						
19) Please estimate the average number of hours your Quality First Coach spends in your classroom with you during a typical onsite visit:						
() Less than 1 hour						
() About 1 hour						
() Between 1 and 2 hours						
() More than 2 hours						
20) To what extent does the amount of time your Quality First Coach regularly spends in your classroom meet your needs?						
() It is not enough time to meet my needs						
() It is enough time to meet my needs						
() It is too much time						
21) Is your Quality First Coach able to make an extra visit or spend extra time with you in your classroom if requested?						
() Yes						
() No						
() Sometimes						
() I've never asked my Coach to spend extra time with me						
22) When do you usually request that your Quality First Coach come for an extra visit or spend extra time in your classroom?						
() When I have additional questions and concerns that cannot be addressed during regular visits						
() When there are particular classroom circumstances, like a staffing change						
() When there are ongoing scheduling challenges						
() When a Quality First observation or assessment is coming up						

() Other, please describe:
() Not applicable, I do not ask my Coach to spend extra time with me
23) On average, how many times per month do you communicate with your Quality First Coach in other ways (phone, email, other) outside of their onsite visits?
() None
() 1-2 times
() 3-5 times
() More than 5 times
24) What are the THREE primary things you have worked on with your Quality First Coach? (Please select your top 3)
[] Developing an understanding of the Quality First rating process and requirements
[] Setting goals for quality improvement in my classroom
[] Preparation for my ERS observations (e.g., classroom environment, materials, etc.)
[] Preparation for my CLASS observations (e.g., emotional support, instructional support, etc.)
[] Ensuring the AZELS are clearly reflected in my written activity plans and shared with families
[] Ensuring child assessment is an ongoing process and assess progress in all domains
[] Picking out new materials or equipment for my classroom
[] Re-arranging the environment in my classroom
[] Getting my families more involved
[] Planning goals for my training/education
[] I did not work on anything with my Quality First Coach
Other, please specify::

Other Quality First Supports

25) How helpful were the following Quality First supports to improving the quality of your classroom?

	Not Used	Not Very Helpful	Somewhat Helpful	Neutral	Helpful	Very Helpful
Onsite training by my Quality First Coach	()	()	()	()	()	()
Quality First incentives for purchasing classroom materials or equipment	()	()	()	()	()	()
Quality First Child Scholarships	()	()	()	()	()	()
The Feedback Report from the CLASS Observation	()	()	()	()	()	()
The Feedback Report from the ERS Observation (ECERS-R or ITERS-R)	()	()	()	()	()	()
The Feedback Report from the Quality First Points Scale Assessment	()	()	()	()	()	()

Early Childhood Mental Health Consultation System (Smart Support)	()	()	()	()	()	()
Early Care and Education Inclusion (ECEI+)	()	()	()	()	()	()
Other	()	()	()	()	()	()
27) What do you feel ar	e the TOP 7	ΓWO barrieι	rs to your progra	nm achieving	a higher star	rating?
[] The ERS assessment s	score					
[] The CLASS assessme	nt score					
[] Our staff's understand	ling of the pr	actices measi	ured on the ERS a	assessment		
[] Our staff's understand	ling of the pr	actices measi	ured on the CLAS	SS assessment		
[] Staff qualifications						
[] Staff turnover						
[] Teacher-Child ratios						
[] Curriculum practices						
[] Child Assessment prac	ctices					
[] Other administrative p	oractices, ple	ase specify::				
[] Other, please specify::	;					
[] Not applicable, my pro	ogram has al	ready receive	ed a 5 star rating			

Quality First Assessment Observational Tools

In the following questions, we are interested in learning more about your perceptions of tools such as the Environment Rating Scales (e.g., ECERS-R, ITERS-R, FCCERS-R) and the CLASS that measure quality by observing the classroom.

28) In your experience, what are the TOP TWO benefits of the Environment Rating Scales?
[] The scales are easy for me to understand
[] I see a clear connection between what the scales measure and classroom quality
[] I am able to easily make improvements or changes to help our program achieve a higher ERS score
[] The scales reflect our program's cultural practices
[] I don't know, I'm not very familiar with this observational assessment
[] Other, please specify:
29) What are the TOP TWO challenges you experience with the Environment Rating Scales?
[] The scales are difficult for me to understand
[] I do not understand the relationship between what the scales measure and classroom quality
[] I cannot easily make the improvements or changes that would allow our program to achieve a higher ERS score
[] The scales do not reflect my program's cultural practices
[] I don't know, I'm not very familiar with this observational assessment
[] Other, please specify::
30) In your experience, what are the TOP TWO benefits of the CLASS observational tool?
[] Most or all of the dimensions (instructional support, positive climate, negative climate, etc.) are easy for me to understand
[] I see a clear connection between what the dimensions measure and quality interactions with children

[] I am able to easily make improvements or changes to help our program achieve a higher CLASS score
[] The CLASS reflects our program's cultural practices
[] Not applicable, my program does not receive this assessment
[] I don't know, I'm not very familiar with this observational assessment
[] Other, please specify::
31) What are the TOP TWO challenges you experience with the CLASS observational tool?
[] Some of the dimensions (instructional support, positive climate, negative climate, etc.) are difficult for me to understand
[] I do not understand how what the dimensions measure relates to quality interactions with children
[] I cannot easily make improvements or changes that would allow us to achieve a higher CLASS score
[] The CLASS does not reflect our cultural practices
[] I don't know, I'm not very familiar with this observational assessment
[] Not applicable, my program does not receive this assessment
[] Other, please specify::
Curriculum and Assessment Practices
32) Do you currently follow a specific curriculum for infants and toddlers?
() Yes
() No
() I don't know
33) Please select the main or core curriculum you use for infants and toddlers:
() Creative Curriculum for Infants, Toddlers, and Twos
() High/Scope for Infants and Toddlers
() Program for Infant/Toddler Care (PITC)

() My program uses an approach, s Approach	such as Montes:	sori, Reggio Emi	lia or another	type of Project	t
) My program uses a locally deve ourselves	loped curriculu	m – OR – a curri	culum we hav	e developed	
) Other curriculum for infants and	d toddlers, pleas	se describe::			
34) How useful is [your selected i	infant and todo	dler curriculum	in the follow	ing:	
	Not Very Helpful	Somewhat Helpful	Neutral	Helpful	Very Helpful
Supporting individual children in the classroom	()	()	()	()	()
Improving your instructional practices	()	()	()	()	()
Contributing to improved classroom quality	()	()	()	()	()
35) What is the main benefit to uvour classroom?	sing [your sele	ected infant and	toddler curri	culum] in	
	ou face when u	ısing [your selec	ted infant and	d toddler	
urriculum] in your classroom?			ted infant and	d toddler	
36) What is the main challenge yeurriculum] in your classroom? 37) Do you follow a specific curr			ted infant and	d toddler	

() I don't know
38) Please select the main or core curriculum you use for preschoolers:
() Creative Curriculum for Preschool
() High/Scope for Preschoolers
() Opening the World of Learning (OWL)
() High Reach
() Core Knowledge
() Everyday mathematics
() My program uses an approach, such as Montessori or Project Approach
() My program uses a locally developed curriculum – OR – a curriculum we have developed ourselves
() Other curriculum for preschoolers, please describe:

39) How useful is [your selected preschool curriculum] in the following:

	Not Very Helpful	Somewhat Helpful	Neutral	Helpful	Very Helpful
Supporting individual children in the classroom	()	()	()	()	()
Improving your instructional practices	()	()	()	()	()
Contributing to improved classroom quality	()	()	()	()	()

40) What is the main benefit to using [your selected preschool curriculum] in your classroom?	

41) What is the main challenge you face when using [your selected preschool curriculum] in your classroom?
42) Do you use a tool to conduct regular child assessments for infants and toddlers (e.g., Ages and Stages, High/Scope, etc.)?
() Yes
() No
() I don't know
43) Please select the main or core assessment tool you use for infants and toddlers:
() Creative Curriculum for Infants, Toddlers & Twos: Developmental Continuum Assessment Toolkit
() High/Scope Child Observation Record (COR) for Infants and Toddlers
() The Ounce Scale (developed for infants and toddlers)
() Ages and Stages Questionnaire (ASQ)
() Battelle Developmental Inventory (BDI)
() Other, please specify:
44) How often do you collect child assessment data for infants and toddlers?
() Twice yearly/biannually
() Quarterly
() Monthly
() Weekly
() Daily
() Never

45) How do you use the results f	rom these chil	d assessments?	(Please select	all that apply	·)
[] Plan large group activities/crea	te lesson plans				
[] Determine children's placemen	it in groups				
[] Plan small group activities					
[] Create individualized learning	plans for ALL	children			
[] Create individualized learning	plans for SOM	E children			
[] Collaborate with parents in des	igning goals fo	r their child			
[] Other, please specify::					_
46) How useful is this infant and	l toddler asses	sment in the foll	lowing:		
	Not Very Helpful	Somewhat Helpful	Neutral	Helpful	Very Helpful
Supporting individual children in the classroom	()	()	()	()	()
Improving your instructional practices	()	()	()	()	()
Contributing to improved classroom quality	()	()	()	()	()
47) What is the main benefit to a				classroom?	

49) Do you use a tool to conduct regular child assessments for preschoolers?
() Yes
() No
() I don't know
50) Please select the main or core assessment tool you use for preschoolers:
() Creative Curriculum for Preschool: Developmental Continuum Assessment Tool for Ages 3 - 5
() Teaching Strategies GOLD TM
() High/Scope Preschool Child Observation Record (COR), Second Edition
() Work Sampling, Developmental Guidelines, Preschool 3
() Work Sampling, Developmental Guidelines, Preschool 4
() Ages and Stages Questionnaire (ASQ)
() Battelle Developmental Inventory (BDI)
() Other, please specify:
51) How often do you collect child assessment data for preschoolers?
() Twice yearly/biannually
() Quarterly
() Monthly
() Weekly
() Daily
52) How do you use the results from these child assessments? (Please select all that apply)
[] Plan large group activities/create lesson plans
[] Determine children's placement in groups
[] Plan small group activities
[] Create individualized learning plans for ALL children
[] Create individualized learning plans for SOME children

Collaborate with parents in desi Other, please specify::					
3) How useful is this preschool a		he following:			
	Not Very Helpful	Somewhat Helpful	Neutral	Helpful	Very Helpfu
Supporting individual children in the classroom	()	()	()	()	()
Improving your instructional practices	()	()	()	()	()
Contributing to improved	()	()	()	()	()
classroom quality		()			
	sing this assess	sment in your cl	assroom?		
classroom quality (4) What is the main benefit to u	sing this assess	sment in your cl	assroom?		
classroom quality (4) What is the main benefit to u (5) What is the main challenge y	ou face when u	sment in your cl	assroom? ment in your	classroom?	
classroom quality (4) What is the main benefit to use (5) What is the main challenge years (6) Please rate how often your webjectives for children based on the control of	ou face when u	sment in your cl	assroom? ment in your	classroom?	

() Most of the time
() Always
() I don't know
57) Please rate how often the Arizona Early Learning Standards (AZELS) are clearly reflected in your written activity/lesson plans (i.e., each lesson plan refers to or identifies at least one AZELS that will be addressed by the activity):
() Never
() Sometimes
() Most of the time
() Always
() I don't know
58) Please rate how often the Infant-Toddler Development Guidelines are clearly reflected in your written activity/lesson plans.
() Never
() Never () Sometimes
() Sometimes
() Sometimes () Most of the time
() Sometimes () Most of the time () Always
() Sometimes () Most of the time () Always () I don't know 59) Please rate how often your written activity/lesson plans include modifications, strategies, and/or adaptations to fully involve all children with special health or
() Sometimes () Most of the time () Always () I don't know 59) Please rate how often your written activity/lesson plans include modifications, strategies, and/or adaptations to fully involve all children with special health or developmental needs.
() Sometimes () Most of the time () Always () I don't know 59) Please rate how often your written activity/lesson plans include modifications, strategies, and/or adaptations to fully involve all children with special health or developmental needs. () Never
() Sometimes () Most of the time () Always () I don't know 59) Please rate how often your written activity/lesson plans include modifications, strategies, and/or adaptations to fully involve all children with special health or developmental needs. () Never () Sometimes

Family Engagement

children's growth and development?
() Very confident
() Somewhat confident
() Not confident
61) How often do you offer parent/teacher conferences?
() My program does not offer parent/teacher conferences on a regular basis
() Once a year
() Twice a year or more
() Other, please specify:
62) How many families attend your parent/family-teacher conferences?
() Nearly all families attend
() About half of our families attend
() Less than half of our families attend
() We do not offer parent/family-teacher conferences at my center/site
63) Outside of formal family-teacher conferences, how often do you share children's growth and development progress with families in your classroom?
() Daily or a few days per week
() Weekly or a few times per month
() Monthly
() Twice per school year
() Quarterly (four times per school year)
() Never

64) How often do you share child assessment results with your families?
() Never, because we do not collect child assessment information
() Never
() Annually
() Quarterly
() Monthly
() Weekly
() Daily
65) Are you or your other classroom staff able to communicate with families in their native/home language?
() Yes
() No
() Sometimes/Somewhat
66) As a teacher, what specific activities do you do to support the development of children's positive cultural identity or to be sensitive to cultural differences? (Select all that apply)
[] Learn about the cultural heritage, practices, stories, activities, and/or languages of families
[] Have posters/signs in families' home language(s)
[] Arrange the care setting so that it reflects the cultural backgrounds of the children and their families
[] Gather information about families' beliefs, customs, and ways that each family does things
[] Interact with children in ways that are in keeping with their family's beliefs, customs, and ways of doing things
[] Promote ways to communicate with families who speak a language not spoken by the provider
[] Other, please describe::

Perceptions of Quality First

67) How would you say your classroom's quality compares to other classrooms in your program/center?
() My classroom is of similar quality to the other classrooms in my program/center
() My classroom is of higher quality than the other classrooms in my program/center
() My classroom is of lower quality than the other classrooms in my program/center
() We do not have any additional classrooms at my program/center
() Other, please specify:
68) What is your overall impression of Quality First as a tool and resource for improving your classroom's quality?
() Extremely positive
() Somewhat positive
() Neutral
() Somewhat negative
() Extremely negative
69) Overall, do you feel that the Quality First rating accurately reflects the quality of your program?
() Yes
() No
() I don't know

70) Please indicate your level of agreement with the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe my program is of higher quality because we joined Quality First.	()	()	()	()	()
I have made changes in my classroom as a result of my program joining Quality First.	()	()	()	()	()
We have made changes to our program as a result of joining Quality First.	()	()	()	()	()

Gift Card Drawing

71) Thank you for taking this survey! If you would like to be entered into the gift card drawing,
please provide us with your first name and email address. You name and email will not be linked to
the survey data, this is only for the purposes of the gift card drawing.

First Name:

Email Address:	
Thank You!	
Thank you again for taking the time to complete this survey!	

Quality First Program Implementation Survey (TA Providers) Introduction

Dear Quality First coaching providers, technical assistance (TA) providers, and other program implementers,

Child Trends, a non-profit research organization, is leading an evaluation of the First Things First Quality First QIRS. We are surveying Quality First coaching and TA providers, along with other program implementers to learn more about how the Quality First system works.

This online survey is about your role as a TA or other support provider and the activities and resources used to support participants' quality improvement process. We define quality improvement as activities designed to improve early care and education program quality and to support programs in making quality improvements that will lead to higher QIRS ratings. We are interested in your impressions of the quality improvement process, how much effort and resources are needed for programs to improve their quality rating, and which approaches are most effective in facilitating programs' improvement.

The survey should take about 20 minutes to complete. Your answers will be kept confidential and compiled with other respondents. No one will be identified by name; however, your region may be identified in the final report. Participation is voluntary and refusal to participate will not affect you in any way.

If you have any questions about this study or the survey, please contact Danielle Hegseth at (240) 223-9272 or dhegseth@childtrends.org. We hope that you will take this opportunity to share your experiences with Quality First.

1) Do you agree to participate in this survey?*
() Yes
() No

Background and Education

2) What best describes your role with Quality First?
() Coach
() Coaching Supervisor
() Child Care Health Consultant (CCHC)
() Child Care Health Consultant Supervisor
() Assessor
() Assessor Supervisor
() Data system manager
() Other, please describe:
3) How many years have you been working within Quality First as a [question("value"), id="9"]?
() Less than 1 year
() 1-3 years
() 4-6 years
() More than 6 years
4) In which First Things First region(s) do you currently serve Quality First participants? (Select all that apply)
[] Cochise
[] Coconino
[] Cocopah Tribe
[] Colorado River Indian Tribes
[] East Maricopa
[] Gila
[] Gila River Indian Community

[] Graham/Greenlee
[] Hualapai Tribe
[] La Paz/Mohave
[] Navajo Nation
[] Navajo/Apache
[] Northwest Maricopa
[] Pascua Yaqui Tribe
[] Phoenix North
[] Phoenix South
[] Pima North
[] Pima South
[] Pinal
[] Salt River Pima Maricopa Indian Community
[] San Carlos Apache
[] Santa Cruz
[] Southeast Maricopa
[] Southwest Maricopa
[] Tohono O'odham Nation
[] White Mountain Apache Tribe
[] Yavapai
[] Yuma
5) What is your employment status with Quality First?
() Full-time employee/> 30 hours per week
() Part-time employee/< 30 hours per week
() Part-time consultant/contractor/< 30 hours per week
() Other, please describe:
6) How many years have you been working in early childhood or a related education field?
() Less than 3

() 3-7					
() 7-10					
() 10-15					
() More than 15					
7) What is the l	nighest level of educa	tion you have a	ttained beyond High S	chool/GED?	
() None beyond	high school				
() Some college	courses but no degree	:			
() Two year col	lege degree (Associate	Degree)			
() Two year col	lege degree in early ch	ildhood or a rel	ated field		
() Bachelor's de	egree				
() Bachelor's de	egree in early childhoo	d or a related fie	eld		
() Graduate deg	ree (Master's or above	e)			
() Graduate deg	ree (Maeter's or above) in early childh	ood or a related field		
8) Do you have	a Child Developmen	t Associate (CD)A)		
() Yes					
() No					
() Currently in p	progress to receive a C	DA			
Training					_
9) Have you pa	rticipated in training	opportunities	through the Quality Fi	rst Academy?	
() Yes					
() No					
() I don't know					
10) How well deprepared you to		ng you receive	d through the Quality	First Academy	
() Not at all	() Not well enough	() Neutral	() Somewhat well	() Verv well	

11) Please explain why the training(s) did not prepare you well to do your job.					
12) What other training would you like to have offered through the Quality First Academy that is currently not available?					
13) Have you received training for your job that was not offered through the Quality First Academy?					
() Yes					
() No					
() I don't know					
14) What content did those trainings include? (Please select all that apply)					
[] The Quality First coaching model					
[] Supporting teachers on curriculum and assessment practices					
[] Supporting teachers in instructional practices					
[] Supporting teachers on the CLASS					
[] Supporting teachers on the ERS					
[] Supporting teachers and/or directors on administrative practices					
[] National Training Institute for Child Care Health Consultants (NTICCHC) curriculum training					
[] Arizona Early Learning Standards (AZELS)					
[] Infant-Toddler Developmental Guidelines (IDTG)					
[] Other, please describe:					

Initial On-site Meeting

15) How do you initially assess a	participant's level of readiness	when you first start working
with a program? (2-3 sentences)		

16) How much time do you typically spend preparing for your <u>initial</u> on-site meeting with a program?

- () Less than 1 hour
- () 1-2 hours
- () 2-3 hours
- () More than 3 hours

17) What are your primary goals when conducting an initial on-site visit? (Please select your top 3 goals)

	First	Second	Third
To build rapport with the center program director/family child care provider			
To answer questions about participating in Quality First			
To review the Quality First Participant Guide			
To get an initial understanding of programs' needs, areas where they may need additional support			
To identify program goals and the available resources to support those goals			
To meet with program staff			
To observe a classroom			
Other			

18) Please describe your other primary goal(s) when conducting an <u>initial</u> on-site visit:			
19) What do <u>programstypicallywanttoachieve</u> in the initial on-site visit common goals)	? (Please s	elect the to	p 3 most
	First	Second	Third
To build rapport with the coach			
To get additional information about participating in Quality First			
To learn about the incentive package			
To get their questions about participating in Quality First answered			
To communicate their needs and areas where they feel additional support is needed			
To help define their goals and learn about the resources available to support those goals			
Other			
20) Please describe the other most common goal(s) for programs in the 21) How do you use the information you collect from the initial site visi			oly)
[] To determine the program's level of technical assistance needs			
[] To begin their Quality Improvement Plan			
[] To set a technical assistance calendar			
[] To set a professional development calendar			
[] To set a regular meeting schedule			
[] To set goals for the next visit			

[] Other, please describe:	_

Goal Identification

- 22) Do you work with program directors, owners, and/or other staff to develop a Quality Improvement Plan (QIP)?
- () Yes
- () No
- () I don't know

23) How helpful are the following in developing a QIP that meets the needs of participants?

Developing a plan that:

	Not at all helpful	Somewhat helpful	Neutral	Helpful	Very helpful
Prioritizes the program's goals	()	()	()	()	()
Describes "why" achieving these goals will help improve the program's quality	()	()	()	()	()
Identifies the resources needed to achieve each goal	()	()	()	()	()
Identifies who is responsible for each action	()	()	()	()	()
Identifies a timeline for achieving each goal	()	()	()	()	()
Identifies or develops ideas about the evidence needed to demonstrate the goal has been achieved	()	()	()	()	()

24) How frequently is the QIP discussed or addressed during your onsite visits?

()	All	visits
()		1 10100

⁽⁾ As needed

() Never				
() I have never develope	ed a Quality Improven	nent Plan		
() Other, please describ	e:			
25) Do you use the QII improving their quality		ams' progress	on achieving th	eir goals and
() Yes, regularly				
() Yes, sometimes depe	nding on the goal			
() No, never				
26) How useful is the d quality?	evelopment of the Ql	(P for helping p	participants imp	prove their
() Not at all useful	() Somewhat useful	() Neutral	() Useful	() Very useful
27) What information improvement for their			ise to identify a	reas of
[] The current education	n and training status of	staff		
[] The demographics of	the children they serv	e (including dis	ability status)	
[] Data or information t	hey have gathered from	n staff or paren	ts	
[] CLASS, ERS, or Qua	ality First Points Scale	feedback from	the baseline/init	ial rating summary report
[] The Arizona Early Le Guidelines (IDTG)	earning Standards (AZ	ELS) and/or Int	fant-Toddler De	velopmental
[] Other, please describ	e:			
28) Do you believe the prioritize the most imp	_		•	· ·
() Yes				
() No				
() I don't know				

29) Why do you believe QIPs are an effective vimprovement? (2-3 sentences)	way to identify and prioritize areas of program
30) How could the process of identifying and pimproved? (2-3 sentences)	orioritizing programs' areas for growth be

31) Below are some resources or activities you may use to identify program's areas of improvement.

How useful is each of the following items in helping you make that assessment?

	Not at all useful	Slightly useful	Neutral	Useful	Very Useful	Do not use
The current education and training status of staff	()	()	()	()	()	()
The demographics of the children they serve (including disability status)	()	()	()	()	()	()
CLASS, ERS, or QFPS feedback from the baseline/initial rating summary report or self-assessments	()	()	()	()	()	()
Observations of the director and/or classrooms	()	()	()	()	()	()
The Arizona Early Learning Standards (AZELS) and/or Infant-Toddler Developmental Guidelines (IDTG)	()	()	()	()	()	()

Addressing Challenges

Participants at the Rising Star (1 star) and Progressing Star (2 star) levels receive 6 hours of onsite coaching each month to support their quality improvement process. Participants in the Quality (3 star), Quality Plus (4 Star), and Highest Quality (5 Star) levels receive 4 hours of onsite coaching each month to support their quality improvement process.

32) Do you ever need to deviate from the required number of visits or hours?
() Yes
() No
33) What are the most common reasons you may deviate from the required number of coaching visits or hours?
[] If a teacher or director has additional questions and concerns that cannot be addressed outside of the required 4 or 6 hours per month
[] If there are particular classroom circumstances, like a staffing change
[] If there are ongoing scheduling challenges
[] If a teacher or director requests extra time
[] Other, please describe:

34) What are the most common activities you do when visiting a classroom? (Select the top 3 most common)

	First	Second	Third
Demonstrate instructional and/or staff-child interaction strategies (e.g. redirection, developing modifications for individual children, enhancing language skills, etc.)			
Demonstrate health and safety practices			
Review lesson plans and provide feedback			
Observe the classroom environment			
Review child assessments and provide feedback			

Plan for how to provide feedback to parents/families		
Explain how to implement a goal or activity from the QIP within the classroom		
Other		

35) Please describe the other most common activities you do when visiting	na a classroom:
33) I least describe the other most common activities you do when visiti	ig a classioom.
36) What Quality First Ratings Criteria do programs typically need the	most help with?
[] Health and safety practices	
[] Staff Qualifications	
[] Teacher-Child Interactions (this includes teacher-child interactions, posit classroom organization, instructional learning supports, or preparing for the	
[] Learning environments (including preparing for the ERS)	
[] Lessons	
[] Group sizes	
[] Child assessments	
[] Parent communication	
Other, please describe:	

37) What are the three most effective strategies you have used to help programs address these areas of need? (Please select top three)

	First	Second	Third
Providing access to professional development			
Providing access to other trainings			
Conducting general classroom or program observations and providing feedback			
Conducting a practice CLASS or ERS assessment and providing feedback			
Coaching or modeling effective approaches to teaching or interaction			

elp progi	rams	
am you'	re working	with?
with higl	ner rated	
ogram?		
	°am you'	elp programs cam you're working with higher rated

Helping programs apply for supplemental funding or incentives

with a program?	de what strate	eg, to the	
Resources			
44) In your experience, what are the three most common types of respect to purchase or obtain in order to improve their quality rating b		ams typica	lly
	First	Second	Third
A published or off the shelf curriculum			
Professional development for staff (including training or formal education)			
New technology			
Books, toys, or other classroom materials			
Furniture or safety equipment			
Funding for more staff or higher staff compensation/benefits			
Other			
45) Please describe the other most common resource(s) programs typobtain in order to improve their quality rating by one level:	oically need to	purchase	or
46) Would you say that purchasing or obtaining these resources is a programs?	significant bu	ırden for n	nost
() Yes, generally			
() No, not really			

48) What helps reduce the burden of purchasing or obtaining resources?
49) What are some other changes in practice you most commonly work with programs on to help them move up a quality level?
[] Environmental changes such as room arrangement
[] Changes in health practices (e.g. hand washing, diapering)
[] Changes in safety practices (e.g. playground equipment, exits and emergency procedures)
[] Improving teacher-child interactions
[] Guidance on the implementation of specific teaching strategies
[] Training for staff
[] Facilitating support in lesson planning and/or child assessment
[] Policy development
[] Other administrative support practices, please describe:
[] Other, please describe:

The Quality First Program

50) How effective are the following Quality First components in helping participants improve program quality?

Quality First components:

	Ineffective	Somewhat effective	Neutral	Effective	Very Effective
Individualized guidance and support from a coach	()	()	()	()	()
Monthly on-site visits	()	()	()	()	()
Targeted training and TA	()	()	()	()	()
Setting Goals	()	()	()	()	()

()	()	()	()	()
()	()	()	()	()
()	()	()	()	()
()	()	()	()	()
()	()	()	()	()
()	()	()	()	()
()	()	()	()	()
()	()	()	()	()
lity First rating	gs are an accur	rate reflection	of program	quality?
First ratings a	re an accurate	reflection of	program qua	lity?
igs be improve	d to better refl	ect program	quality?	
	() () () () () () () (i) (i) (i) First rating	() () () () () () () () () () () () () (() (

54) Overall, do you feel that the Quality First rating process accurately reflects the various aspects the different levels of quality in its participating programs?
() Yes
() No
() I don't know
55) Why do you feel the Quality First ratings process accurately reflects the different levels of quality?
56) How could the Quality First ratings process be improved?
57) Is there anything else you would like to say about your role and/or how you support programs' quality improvement?

Data collection and management

58) How effective is the data system in supporting each of the following activities?

	Ineffective	Somewhat effective	Neutral	Effective	Very effective
Data collection	()	()	()	()	()
Data entry	()	()	()	()	()
Data management	()	()	()	()	()
Data review/analysis	()	()	()	()	()

Document review		()	()	()	()	(
Report writing		()	()	()	()	(
Collecting information	n on programs	()	()	()	()	(
Uploading files		()	()	()	()	(
59) How often do you	use the Extran	net data system	?			I
() Everyday						
() Several times a week	ζ					
() Once a week						
() Several times a mon	th					
() Other, please describ	oe:					
	•					
60) How easy is it for	you to use the	Quality First E	xtranet data sy	stem?		
() Very difficult	() Difficult	() Easy	() Very easy			
61) Please rank the fol for <u>theleast</u> , with 1 be it the least (or 7 if you	ing the reason need the "oth	you use the External er" option).	tranet the most	and 6 being	the reason yo	
If you rank "other", po	lease specify wi	hat you use the	Extranet for in	the comments	s box below.	
I use the Extranet to:						
Enter data al	oout programs'	rating				

_Enter data about programs' observational assessment

_Complete on-going case management activities/tasks

____Enter data about program's technical assistance

_____Review documents

____Analyze data and run reports

Other, please describe below

62) How would you describe the amount of data you are expected to collect as part of your job?
() Too much data
() A little more data than is necessary
() The right amount of data
() A little less data than is necessary
() Not enough data
63) Are there data you currently collect that you believe are unnecessary?
() Yes
() No
() I don't know
64) What data do you find unnecessary to collect?
65) Are there data you are not currently collecting that you believe you should be?
() Yes
() No
() I don't know
66) What data would you like to be collecting that you currently are not?
67) Do you supervise other Quality First staff?
() Yes

() No
() I don't know
68) How would you describe the amount of data they are expected to collect as part of their jobs?
() Too much data
() A little more data than is necessary
() The right amount of data
() A little less data than is necessary
() Not enough data
69) Are there data they currently collect that you believe are unnecessary?
() Yes
() No
() I don't know
70) What data do you think is unnecessary for them to collect?
71) Are there data they are not currently collecting that you believe they should be?
() Yes
() No
() I don't know
72) What data would you like them to be collecting that they currently are not?

73) How good is the Extranet at making your job with Quality First easier?
() Very good
() Somewhat good
() Neither good nor poor
() Somewhat poor
() Very poor
74) What works well about the Extranet data system?
75) How could the Extranet data system be improved?

Overall Perceptions of Quality First

76) What would you say are the main goal(s) of Quality First? (Please select the top three)

	First	Second	Third
To improve the overall quality of the early care and education field in Arizona			
To help parents make informed decisions about choosing a child care provider			
To improve learning outcomes for children in Arizona/close the achievement gap			
To ensure young children in Arizona are ready for kindergarten			
To improve the quality of the early childhood workforce in Arizona			
Ensuring underserved parts of Arizona have access to quality child care			
To help early care and education providers improve classroom instruction and other early childhood services			
Other			

77) Please describe the other main goal(s) of Quality First:						
78) What do you think are the most critical factors that will determine whether Quality First is successful in reaching its goals? (Please select the top three)						
	First	Second	Third			
Recruiting more participants into the Quality First system						
Ensuring parents know about Quality First, use it as a resource						
Sustainable funding						
Ensuring Quality First is integrated or working with other systems like health and social services						
Ensuring more participants from specific groups (e.g. rural programs, school-based programs, Head Start programs, etc.)						
Other						
79) Please describe the other most critical factor(s) that will determine wh Quality First is successful in reaching its goals:	ether					
Thank You! Thank you for completing this survey!						

Arizona Early Care and Education Provider Survey (Non-Quality First Participants)

Introduction

Dear Early Care and Education Provider,

An important goal of First Things First (FTF) and Quality First is to gather feedback from early care and education providers about their efforts to provide high-quality care to young children in Arizona. Your responses to these questions will provide helpful information back to FTF to inform their future efforts.

Child Trends, a non-profit research organization, is administering this survey on behalf of FTF. The survey will take 15-20 minutes to complete. Your responses will remain anonymous and no individual program or respondent will be identified in any report. As a thank you for your time, upon completion of this survey you will have the option of entering into a drawing for one of three \$100

Amazon gift cards.

We thank you for in advance for taking the time to respond candidly and thoughtfully to each of the questions. If you have any questions about this survey, please contact Danielle Hegseth at (240) 223-9272 or dhegseth@childtrends.org.

Thank you!			

Eligibility & Program Information

- 1) Are you currently participating or rated in Quality First?
- () Yes
- () No

2) Have you participated in Quality First in the past, but are no longer in the program?		
() Yes		
() No		
3) Which of the following best describes your program type?		
() Child Care Center		
() Family Child Care		
() I don't know		
4) Which of the following best describes your center?		
() Church-sponsored program		
() School-based		
() Head Start		
() Franchise/chain		
() Independently owned		
() Other, please describe:		
5) Is your early care and education program for profit or not for profit?		
() For profit		
() Not for profit		
() I don't know		

Interest & Awareness

6) How much would you say you know about Quality Rating and Improvement Systems (QRIS) for early care and education programs?
() A lot
() A little
() Not very much
() Never heard of them before
7) Before receiving this survey, had you heard of Quality First?
() Yes
() No
() I don't know
8) How did you first hear about Quality First? (Select all that apply)
[] From another early care and education provider/another child care provider
[] From my licensor
[] From a First Things First Regional Council
[] On the radio
[] From a print advertisement
[] At an early childhood training
[] From the Arizona Department of Health Services
[] From the Arizona Department of Economic Security
[] From the Arizona Department of Education
[] Through an Internet search
[] From a consultant/coach at my program
[] From a Child Care Resource & Referral Network (CCR&R)[]
From an accreditation body
[] From an Internet advertisement

[] From a parent	
[] I don't know	
[] Other, please descri	be:
Description of Qualit	y First
education programs a	ona's Quality Improvement and Rating System (QIRS) for early care and and providers. The purpose of Quality First is to improve the quality of early birth to 5 through three activities:
1. Measuring an	d rating program quality. Quality First measures a program's
quality in the	following areas:
Progr	am Leadership, Management, and Administration
	ning Environment
	Health
	force Qualifications and Professional Development
_	gram receives a star rating that designates its quality level
,	one to five stars) ograms improve their quality.
	ams receive financial incentives, coaching, and technical support
	sing fees are subsidized
	ams advertise their quality to prospective families
o Paren	ts searching for early care and education for their children can search
provi	ders' ratings for free at
http:/	<u>/qualityfirstaz.com/search/</u>
,	tle more about Quality First (Arizona's QIRS), how likely is it that your yould consider participating in Quality First?
() Extremely unlikely	() Unlikely () Neutral () Likely () Extremely likely () I don't know
Decision Making	
10) Which of the folloselect your top TWO	owing would most affect your decision TO participate in Quality First? Please answers.
[] It is important for n	ny professional development/professionalism

[] To be part of a state-wide early childhood quality initiative/program
[] To meet a requirement from someone else in my organization or governing body to participate
[] To access supports from a Quality First coach or program implementation specialist (e.g. mental health consultant, inclusion coach, etc.)
[] To better attract families to my program
[] To access cash incentives for program improvement
[] To access Quality First scholarships for children and families
[] To access licensing fee support
[] Other, please describe:
11) Which of the following would most affect your decision NOT to participate in Quality First? Please select your top TWO answers.
[] I don't need it to attract families to my program (families don't ask about it; I have a waiting list).
[] My region has a waiting list for applying for Quality First participation
[] The application/rating process is difficult
[] It is not worth the investment of my time compared to the outcomes you get from participating in Quality First
[] I am waiting to hear from other programs/ providers about their experience first
[] There is not enough financial incentive to join
[] Quality First does not provide enough support for programs/providers
[] I don't need to improve the quality of my program
[] I don't trust that a Quality First rating will accurately reflect my program's quality
[] I don't believe early care and education programs should be rated
[] I do not want my environment to be observed
[] It is too expensive to participate
[] I don't have sufficient information to decide
[] Other, please describe:
12) Is your program currently considering participating in Quality First or might you consider participating at a future date?
() Yes

() No
() I don't know
() I hadn't heard of Quality First before this survey
13) Is there any feedback you would like to provide about Quality First or your program's decision to participate in Quality First now or at a future date?

Your Perceptions

14) Please rate the extent to which you agree or disagree with the following statements.

	Strongl y	Disagree	Neutral	Agree	Strongl y
When choosing child care for their child, parents should consider a program's quality.	()	()	()	()	()
When choosing child care for their child, parents should consider a program's Quality First Rating.	()	()	()	()	()
Quality First Ratings are useful to parents.	()	()	()	()	()
Quality First ratings are useful to early care and education programs.	()	()	()	()	()
The primary purpose of Quality First is to rate the quality of early care and education programs.	()	()	()	()	()
The primary purpose of Quality First is to help early care and education programs improve their quality.	()	()	()	()	()
The primary purpose of Quality First is to share information with parents about the quality of early care and education programs.	()	()	()	()	()

15) What is the biggest obstacle you or your program faces in your effort to provide high quality early care and education?					
16) What supports would be the most helpful in addressing these challenges?					
Teaching and Tracking Children's Learning					
17) How does your program create or select the activities and materials to use with infants/toddlers? (Choose all that apply)					
[] Our program does not serve any infants/toddlers					
[] Our program has developed activities over the years that we revise and reuse					
[] Our program uses a specific approach such as Montessori or Reggio Emilia					
[] Our program purchased a curriculum					
[] Other, please describe:					
18) Which curriculum did your program purchase?					
() Creative Curriculum for Infants, Toddlers, and Twos					
() High/Scope for Infants and Toddlers					
() Program for Infant/Toddler Care (PITC)					
() Other, please describe:					
19) How does your program create or select the activities and materials to use with preschoolers? (Choose all that apply)					
[] Our program does not serve any preschoolers					
[] Our program has developed activities over the years that we revise and reuse					
[] Our program uses a specific approach such as Montessori or Reggio Emilia					
[] Our program purchased a curriculum					
[] Other, please describe:					

20) Which curriculum did your program purchase?
() Creative Curriculum for Preschool
() High/Scope for Preschoolers
() Opening the World of Learning (OWL)
() High Reach
() Core Knowledge
() Everyday mathematics
() Other, please describe:
21) Have your teachers received training on the curriculum or approach your program uses to create or select teaching activities?
() Yes, a formal training sponsored by the publisher or other group
() Yes, a training that we have developed internally for new educators
() Yes, training provided by a mentor or coach
() No, training is not needed for our approach
() No, but this is something our program is exploring
() No, not all of our staff has been trained on our approach
() Other, please describe:
22) How recently have your staff participated in training on the curriculum or approach your program uses to create or select teaching activities?
() All or most staff have participated within the past 6 months
() All or most staff have participated within the past year
() All or most staff have participated within the past 2 years
() Training varies by staff member
() It's been more than 2 years since all or most staff has participated in training
23) How do you or the teachers in your program collect information, observe, and document children's growth and learning with infants/toddlers? (Choose all that apply)
[] Our program does not serve any infants/toddlers
[] We have developed our own checklist of skills we look for in our infant/toddler children
[] We periodically use a developmental screener

[] We develop our own strategies for observing children and identifying their areas of strength and improvement
[] We use an assessment tool or framework
[] Other, please describe:
24) Which developmental screener do you use?
() Ages and Stages Questionnaire (ASQ)
() Child Developmental Inventories (CDI)
() The Ounce Scale
() Brigance Screens
() Infant-Toddler and Family Instrument (ITFI)
() Denver Developmental Screening Test (DDST)
() Other, please describe:
25) Which assessment tool or framework do you use?() Creative Curriculum for Infants, Toddlers & Twos: Developmental Continuum Assessment Toolkit
() High/Scope Child Observation Record (COR) for Infants and Toddlers
() The Ounce Scale (developed for infants and toddlers)
() Arizona Early Learning Guidelines
() Other, please describe :
26) How do the teachers in your program collect information, observe, and document children's growth and learning with preschoolers? (Choose all that apply)
[] Our program does not serve any preschoolers
[] We have developed our own checklist of skills we look for in our preschool children
[] We periodically use a developmental screener
[] We develop our own strategies for observing children and identifying their areas of strength and improvement
[] We use an assessment tool or framework
[] Other, please describe:

27) Which developmental screener do you use?
() Ages and Stages Questionnaire (ASQ)
() Ages and Stages Questionnaire-Social Emotional (ASQ-SE)
() Battelle Developmental Inventory
() Brigance Screens
() Early Screening Inventory
() Denver Developmental Screening Test (DDST)
() Other, please describe:
28) Which assessment tool or framework do you use?
() Creative Curriculum for Preschool: Developmental Continuum Assessment Tool for Ages 3-5
() Teaching Strategies GOLD TM
() High/Scope Preschool Child Observation Record (COR), Second Edition
() Work Sampling, Developmental Guidelines, Preschool 3
() Work Sampling, Developmental Guidelines, Preschool 4
() Other, please describe:
29) Have your teachers received training on the approach your program uses to collect information, observe, and document children's growth and learning?
() Yes, a formal training sponsored by the publisher or other group
() Yes, a training that we have developed internally for new educators
() Yes, training provided by a mentor or coach
() No, training is not needed for this approach
() No, but this is something our program is exploring
() No, not all of our staff has been trained on our approach
() Training varies by staff member
() Other, please describe:
30) How recently have your educators participated in training on the approach your program uses to collect information, observe, and document children's growth and learning?
() All or most staff have participated within the past 6 months

() All or most start have participated within the past year
() All or most staff have participated within the past 2 years
() It's been more than 2 years since all or most staff has participated in a training
31) How often does your program staff share assessment results with families in your program?
() Only as needed/requested
() Quarterly
() Monthly
() Weekly
() Daily
() Not applicable, we do not share assessment results with families

About Your Program

32) What best describes where your program is located?
() Rural (not in town or city)
() Small town (population less than 20,000)
() Medium town (population of 20,000 - 50,000) ()
Large town (population of 50,000 - 100,000)
() Urban (in city with population greater than 100,000)
() Suburban (in area surrounding city with population greater than 100,000)
33) What is the zip code where your program is located?
34) Is your program currently full?
() Yes
() No
() I don't know
35) Do you currently have a waiting list for your program?
() Yes
() No
() I don't know
36) How many children are currently enrolled in your program? Please enter the total number of children enrolled (both part-time and full-time). Please only enter numeric digits. If you do not serve an age group, please enter zero (0).
Infants (0-11m):

Toddlers (12-35m):
Preschoolers (36-60m+):
37) How many children in your program received child care assistance (from the state Child Care Development Block Grant (CCDBG) subsidy) in the past month? Please only enter numeric digits. If you do not serve an age group, please enter zero (0).
Infants (0-11m):
Toddlers (12-35m):
Preschoolers (36-60m+):
38) How many children currently in your program have an Individualized Family Service Plan (IFSP) or Individualized Education Program (IEP)? Please only enter numeric digits. If you do not serve an age group, please enter zero (0).
Infants (0-11m):
Toddlers (12-35m):
Preschoolers (36-60m+):
39) How many children currently in your program are dual language learners? Please only enter numeric digits. If you do not serve an age group, please enter zero (0).
Infants (0-11m):
Toddlers (12-35m):
Preschoolers (36-60m+):
40) Do you offer other services to families, in addition to early care and education (e.g., health services, social services, home visiting)?
() Yes
() No
() I don't know

41) Please describe the other services you offer to families:
About You
42) Please select your role
() Director
() Owner
() Other, please describe:
43) How long have you worked as a [question("value"), id="60"] at this program?
() Less than 1 year
() 1-2 years
() 2-5 years
() 5-8 years
() 8-10 years
() Over 10 years
44) Including years spent as an assistant teacher, director, coordinator, family child care provider or other professional position, how many years altogether have you worked in the early care and education field? (Please only count years in the field since you were 18 years old)
() Less than 1 year
() 1-2 years
() 2-5 years
() 5-8 years
() 8-10 years
() Over 10 years
() Over 15 years
() Over 20 years

45) Which of the following best describes your age group?
() Under 25
() 25-35
() 36-45
() 46-55
() 56-65
() Over 65
46) Which of the following best describes your racial or ethnic group? (check all that apply)
[] Asian
[] Black/African-American
[] Latino/Hispanic
[] American Indian/Alaska Native
[] Pacific Islander
[] White/Caucasian
[] Multi-racial
[] Other, please describe:
47) What language do you speak at home with family members?
What language do you speak at home with family members?
() English
() Spanish
() Navajo or another American Indian language
() Other, please describe:
() English and another language EQUALLY
() Multiple other languages EQUALLY

Specify other language:
48) What is the highest level of education you have attained?
() Some High School, but no diploma
() High School Diploma or GED
() Some college, but no degree
() Two year college degree/Associate's Degree
() Two year college degree in Early Childhood or related field
() Bachelor's Degree
() Bachelor's Degree in Early Childhood or related field
() Master's Degree
() Master's Degree in Early Childhood or related field
() Ph.D. or J.D.
() Other, please describe:
49) Do you have a CDA (Child Development Associate)?
() Yes
() No
Gift Card Drawing
As a thank you for your time completing this survey you will be entered into a drawing to win one of three \$100 Amazon gift cards. If you would like to be entered into this drawing, please enter your first name and email address below.
50) First name:
51) Email address:

Ineligibility Thank you for your interest in this survey! However, since you are currently participating in Quality First, you are not eligible to take this survey. If you have any questions about this, please contact Danielle at dhegseth@childtrends.org .
Thank You!
Your responses have been submitted. Thank you very much for taking the time to complete this survey. If you have any questions or concerns, please e-mail Danielle Hegseth at dhegseth@childtrends.org .
Thank you!

Quality First Leadership Staff Interview

Introduction

An important part of the Quality First implementation and validation study is learning about your experiences as a program implementer. This interview is about your role in the Quality First program implementation process and the activities and resources used to support participants' quality improvement.

We define quality improvement as activities designed to improve early care and education classroom and program quality to support programs in making quality improvements that will lead to higher QIRS ratings. We are interested in your impressions of the Quality First quality improvement process, how much effort and resources are needed for programs to improve in quality rating, and which approaches are most effective in facilitating programs' improvement.

Your answers will be kept confidential and compiled with other respondents. No one will be identified by name. Participation is voluntary and refusal to participate will not affect you in any way. Thank you for taking the time to candidly and thoughtfully talk with us today, we greatly appreciate your help!

Do you have any questions before we begin?

- 1. Please describe your current role with Quality First/within First Things First. How long have you been involved with Quality First? Did you have any other roles working in Quality First/First Things First prior to your current role? What was your background experience before working with First Things First/Quality First?
- 2. What would you say are the main goal(s) of Quality First, that is, what Quality First is trying to achieve?
- 3. What do you think are the most critical factors that will determine whether Quality First is successful in reaching its goals?
- 4. In your experience, how effective is the selection process for Quality First applicants? What could be done differently?
- 5. What kinds of interactions, if any, do you have with Quality First participants related to the quality improvement process?
- 6. Now I would like to get your feedback about each of the main components of Quality First and how that relates to overall program quality.
 - a. Coaching:
 - i. What do you see as the main benefit of the Quality First coaching model in helping participants improve their overall program quality? (Probe for: How does the QF

coaching model compare to other PD/coaching models that FTF funds (e.g. coaching done within the Communities or Practice (COP) model as part of the Community-based Professional Development Strategy)

- ii. What are some challenges to implementing the Quality First coaching model?
- b. Assessment (i.e., Environmental Rating Scales, CLASS, Quality First Point Scale):
 - i. What do you see as the main benefit of the Quality First assessments in helping participants improve their overall program quality?
 - ii. What are some challenges to implementing the Quality First assessment model?
- c. Financial Incentives, scholarships:
 - i. What do you see as the main benefit of Quality First financial incentives and scholarships in helping participants improve their overall program quality?
 - ii. What are some challenges to implementing the Quality First financial incentives model?
- d. Specialized assistance (i.e., Child Care Health Consultants, helpline, and if available regionally- mental health and inclusion specialists):
 - i. What do you see as the main benefit of Quality First's specialized assistance in helping participants improve their overall program quality?
 - ii. What are some challenges to implementing Quality First's specialized assistance model?
- e. Professional development (i.e., support for a CDA or Associates degree or continuing education):
 - i. What do you see as the main benefit of Quality First's professional development supports in helping participants improve their overall program quality?
 - ii. What are some challenges to implementing the Quality First professional development model?
- 7. Now I would like to ask about how each main component of Quality First helps program staff learn about <u>early care and education best practices</u>, including the AZELS.
 - a. What do you see as the main benefit of Quality First coaching in helping program staff learn about early care and education best practices, including the AZELS?
 - i. What are the main challenges?
 - b. What do you see as the main benefit of the Quality First assessments in helping program staff learn about early care and education best practices, including the AZELS?
 - i. What are the main challenges?
 - c. What do you see as the main benefit of Quality First's financial incentives in helping program staff learn about early care and education best practices, including the AZELS?
 - i. What are the main challenges?
 - d. What do you see as the main benefit of Quality First's specialized assistance in helping program staff learn about early care and education best practices, including the AZELS?
 - i. What are the main challenges?
 - e. What do you see as the main benefit of Quality First professional development supports

in helping program staff learn about early care and education best practices, including the AZELS?

- i. What are the main challenges?
- 8. From your perspective, what challenges do participants most commonly face when going through the quality improvement process? How are these challenges addressed? Are there common challenges that arise depending on the star level a provider is trying to achieve?
- 9. What do you think are the most critical factors about the participating programs that will determine whether or not a participant is successful in Quality First? In what ways does Quality First or First Things First address these needs or factors?

10. On a scale of 1-5 with 1 being in-effective and 5 being very effective, how effective are the following Quality First components in helping participants improve program quality?

Quality First Component	Ineffective	Somewhat effective	Neutral	Effective	Very effective
Individualized guidance and support by a					
Quality First Coach					
Monthly on-site coaching visits					
Targeted training and TA					
Goal development with coach					
ERS assessments					
CLASS assessments					
QF Point Scale assessments					
Financial Incentive payments based on					
star-level					
Quality First Scholarships					
DHS licensing fee support					
Specialized Assistance (i.e., CCHC					
consultation, helpline)					
Professional development access and					
support (i.e., continuing education					
support)					

Probe with follow-up questions for each response about why respondent feels it is effective or not.

- 11. What additional supports or resources do you feel are needed for Quality First participants to further succeed in the quality improvement process?
- 12. Is there anything else you would like to add about your perceptions of Quality First implementation and your role?

Thank you!

Technical Assistance Supervisor Interview

Introduction

An important part of the Quality First implementation and validation study is learning about your experiences as a program implementer. This interview is about your role in the Quality First program implementation process and the activities and resources used to support coaches, assessors, and child care health consultants as they help guide participants through the quality improvement process. We define quality improvement as activities designed to improve early care and education classroom and program quality to support programs in making quality improvements that will lead to higher QIRS ratings. We are interested in your impressions of the Quality First quality improvement process, how much effort and resources are needed for programs to improve in quality rating, and which strategies are most effective in supporting the coaches and other technical assistance providers.

Your answers will be kept confidential and compiled with other respondents. No one will be identified by name. Participation is voluntary and refusal to participate will not affect you in any way. This interview will take approximately one hour. Thank you for taking the time to candidly and thoughtfully talk with us today, we greatly appreciate your help!

Do you have any questions before we begin?

1. Please describe your role as a supervisor in Quality First. How long have you been involved with

Quality First? What was your background experience before working with Quality First?

- 2. What would you say are the main goal(s) of Quality First, that is, what Quality First is trying to achieve?
- 3. What do you think are the most critical factors that will determine whether Quality First is successful in reaching its goals?
- 4. What kinds of interactions do you have with Quality First participants related to the quality improvement process?
- 5. Now I would like to ask about how you support Quality First [Coaches/Assessors/CCHCs].
 - a. What training do [Coaches/Assessors/CCHCs] require before beginning their work with Quality First participants? What are the main benefits of the Quality First training process? What are the challenges?
 - b. What are your key activities as a [Coaches/Assessors/CCHCs] supervisor? (Additional probes around specific activities supporting teachers.) In what ways are you supported in your role? In what ways do you feel unsupported in your role?
 - c. How do you help [Coaches/Assessors/CCHCs] prepare for supporting teachers on the CLASS and Environmental Rating Scale assessments? [for CLASS, prompt around instructional support]

- d. How do you help [Coaches/Assessors/CCHCs] prepare for supporting teachers on [probe on specific activities that are mentioned in 5b]?
- e. What other training or professional development opportunities do [Coaches/Assessors/CCHCs] have access to through Quality First? Are these required?
 - i. What are some barriers to [Coaches/Assessors/CCHCs] accessing these resources?
- f. What additional resources, materials, or support could [Coaches/Assessors/CCHCs] use to improve their work with participants that they currently do not have access to?
- 6. Now I would like to ask about how each component of Quality First helps program staff learn about early care and education best practices, including the Arizona Early Learning Standards (AZELS).
 - a. What do you see as the main benefit of Quality First's **coaching supports** in helping program staff learn about early care and education best practices, including the AZELS? What are the main challenges?
 - b. What do you see as the main benefit of Quality First's **assessments (e.g. the CLASS and Environmental Rating Scales and QF Points Scale)** in helping program staff learn about early care and education best practices, including the AZELS? What are the main challenges?
 - c. What do you see as the main benefit of Quality First's **financial incentives** in helping program staff learn about early care and education best practices, including the AZELS? What are the main challenges?
 - d. What do you see as the main benefit of Quality First's **specialized assistance** (i.e., CCHC consultation, helpline, etc.) in helping program staff learn about early care and education best practices, including the AZELS? What are the main challenges?
 - e. What do you see as the main benefit of Quality First's **professional development supports** (i.e., continuing education support) in helping program staff learn about early care and education best practices, including the AZELS? What are the main challenges?
- 7. How well do [Coaches/Assessors/CCHCs] align their planning or goal setting with one another? [If they do not, why not?]
- 8. From your perspective, what challenges do [Coaches/Assessors/CCHCs] most commonly face when supporting participants through the quality improvement process?
 - a. How are these challenges addressed?
 - b. What challenges remain to be addressed (obstacles)?
- 9. What do you think are the most critical factors about a [Coach/Assessor/CCHC] that will determine whether they're successful in supporting participants?
 - a. In what ways does Quality First or First Things First address these needs or factors?

10. On a scale of 1-5, with 1 being in-effective and 5 being very effective, how effective are the following Quality First components in helping participants improve program quality?

Quality First Component	Ineffective	Somewhat effective	Neutral	Effective	Very effective
Individualized guidance and support by a					
Quality First Coach					
Monthly on-site coaching visits					
Targeted training and TA					
Goal development with coach					
ERS assessments					
CLASS assessments					
QF Point Scale assessments					
Financial Incentive payments based on					
star-level					
Quality First Scholarships for children attending the program					
DHS licensing fee support					
Specialized Assistance (i.e., CCHC					
consultation, helpline)					
Professional development access and					
support (i.e., continuing education					
support)					

Probe with follow-up questions for each response about why respondent feels it is effective or not.

11.	Is there anything else you would lil	ke to add	about your	perceptions o	f Quality	First
	implementation and your role?					

COACHING SUPERVISORS ONLY

- 12. In your role as a supervisor, have you seen a lot of turnover in coaches? If so, what do you think are key contributing factors to the turnover? How does coaching turnover affect programs?
- 13. In your experience, what do coaches spend most of their time on when working with a program?
 - a. How is this tracked (by the coach, you, and FTF)?
 - b. Do these tracking processes accurately capture the various activities coaches engage in during their visits?
 - c. How could the tracking and monitoring process be improved?

Thank you!

Regional Council Director Interview

Introduction

An important part of the Quality First implementation and validation study is learning about your experiences as a program implementer. This interview is about your role in the Quality First program implementation process and the activities and resources used to support participants' quality improvement.

We define quality improvement as activities designed to improve early care and education classroom and program quality to support programs in making quality improvements that will lead to higher QIRS ratings. We are interested in your impressions of the Quality First quality improvement process, how much effort and resources are needed for programs to improve in quality rating, and which approaches are most effective in facilitating programs' improvement.

Your answers will be kept confidential and compiled with other respondents. No one will be identified by name. Participation is voluntary and refusal to participate will not affect you in any way. Thank you for taking the time to candidly and thoughtfully talk with us today, we greatly appreciate your help!

Do you have any questions before we begin?

- 1. Please describe your current role with Quality First/within First Things First. How long have you been involved with Quality First? Did you have any other roles working in Quality First/First Things First prior to your current role? What was your background experience before working with First Things First/Quality First?
- 2. What would you say are the main goal(s) of Quality First, that is, what Quality First is trying to achieve?
- 3. What do you think are the most critical factors that will determine whether Quality First is successful in reaching its goals?
- 4. In your experience, how effective is the selection process for Quality First applicants? What could be done differently?
- 5. How useful are the reports you receive from Extranet data on the Quality First participants in your region? What do you most commonly use these reports for (tracking QF activities, strategic planning in the region, planning for scholarships)? What other data or information would you like to see in these reports that is not currently available?
- 6. Now I would like to get your feedback about each of the main components of Quality First and how that relates to <u>overall program quality</u>.
 - a. Coaching:

- i. What do you see as the main benefit of the Quality First coaching model in helping participants improve their overall program quality?
- ii. What are some challenges?
- b. Assessment (i.e., Environmental Rating Scales, CLASS, Quality First Point Scale):
 - i. What do you see as the main benefit of the Quality First assessments in helping participants improve their overall program quality?
 - ii. What are some challenges?
- c. Financial Incentives, scholarships:
 - i. What do you see as the main benefit of Quality First financial incentives and scholarships in helping participants improve their overall program quality?
 - ii. What are some challenges?
- d. Specialized assistance (i.e., Child Care Health Consultants, helpline, and if available regionally- mental health and inclusion specialists):
 - i. What do you see as the main benefit of Quality First's specialized assistance in helping participants improve their overall program quality?
 - ii. What are some challenges?
- e. Professional development (i.e., support for a CDA or Associates degree or continuing education):
 - i. What do you see as the main benefit of Quality First's professional development supports in helping participants improve their overall program quality?
 - ii. What are some challenges?
- 7. Do you know about the AZELS, AZ's early learning standards? If yes, what is the main benefit of the AZELS in helping Quality First programs improve quality? Challenges?
- 8. From your perspective, what challenges do participants most commonly face when going through the quality improvement process? How are these challenges addressed? Are there common challenges that arise depending on the star level a provider is trying to achieve?
- 9. What do you think are the most critical factors about the participating programs that will determine whether or not a participant is successful in Quality First? In what ways does Quality First or First Things First address these needs or factors?

10. On a scale of 1-5 with 1 being in-effective and 5 being very effective, how effective are the following Quality First components in helping participants improve program quality?

Quality First Component	Ineffective	Somewhat effective	Neutral	Effective	Very effective
Individualized guidance and support by a Quality First Coach					
Monthly on-site coaching visits					
Targeted training and TA					
Goal development with coach					
ERS assessments					
CLASS assessments					
QF Point Scale assessments					
Financial Incentive payments based on star-level					
Quality First Scholarships					
DHS licensing fee support					
Specialized Assistance (i.e., CCHC consultation, helpline)					
Professional development access and support (i.e., continuing education support)					

Probe with follow-up questions for each response about why respondent feels it is effective or not.

- 11. What additional supports or resources do you feel are needed for Quality First participants to further succeed in the quality improvement process?
- 12. Is there anything else you would like to add about your perceptions of Quality First implementation and your role?

Thank you!

Data System (Extranet) Key Informant Interview

Introduction

- 1. Do you have any questions for me before I begin?
- 2. Describe your role and daily responsibilities with First Things First.
- 3. Describe for me the primary ways in which you are responsible for Quality First data in your role.

Data collected

- 4. Describe the types of Quality First data or information you collect or manage on a regular basis. For example, this could include data collected during an observational assessment, notes from a coaching session with a program, information about your job (e.g., mileage, accounting of time), contact information for programs, or data about the operations of Quality First (e.g., performance information about coaches or assessors, program financials).
 - a. Do you collect this data or do you supervise someone who does?
 - b. How frequently are the data collected?
 - c. What do you do with the data once it has been collected (e.g., it stays on paper, entered into the data system)?
- 5. How do you use this data in your job?
 - a. [IF S/HE SUPERVISES QUALITY FIRST STAFF] How do the people you supervise use data?
 - b. [IF NOT MENTIONED IN THE PRIMARY QUESTION, PROBE FOR]: using data to make decisions about: programs' participation in Quality First; the work of Coach, Assessors and Specialists; Quality First program administration
 - c. Do you use data collected by other organizations?
 - d. Do you use reports (i.e., aggregation of data) on a day-to-day basis in your job?
- 6. Are there other data you are not currently collecting that you think you should be?
- 7. What reports should the system be producing that cannot currently be produced?
 - a. Does the current system support analysis needed for grant opportunities' (e.g., RTT-ELC) reporting requirements (e.g., CCDF or NIEER reporting)?
- 8. What improvements could be made to the way that data is collected, entered and used?

Technology

- 9. Do you think First Things First has adequate technology including hardware, software and the Extranet data system, to implement Quality First in an effective way?
- 10. What do you think is working well about that technology?
 - a. Do you have difficulty in using technology when you're working off-site?
 - b. [IF S/HE SUPERVISES STAFF]: Do the staff you supervise have difficulty in using technology when they're working off-site?
 - c. What are the most effective technologies being used to implement Quality First?
- 11. What improvements could be made to these technologies to improve implementation of Quality First?

Staff experience and knowledge

- 12. Describe the data-related education, training and experience you had prior to beginning your employment at First Things First.
- 13. What additional data-related training or professional development have you received since then?
 - a. What data-related training or professional development have you had that is specific to using the Extranet?
- 14. What additional data-related training or professional development would you like to receive?

Data management practices

- 15. Describe any responsibility you have for ensuring that data collected for Quality First are of high quality. For example, what procedures are in place in your job to ensure that data are collected and entered in a standardized way?
 - a. How do you ensure the data that are entered are accurate;, that is, data are recorded correctly into the Extranet?
 - b. Do you think there are any ways in which the quality of how these data are collected and managed could be improved?
- 16. Do you find that the existing documentation (e.g., codebooks, manuals) describing the data collection and management of Quality First data are adequate?
 - c. What additional data collection and management documentation would be helpful for improving the overall implementation of Quality First?
- 17. What practices are in place so that data are collected and managed in a way that ensures privacy and confidentiality?
 - a. What improvements could be made to these practices?

Organizational practices

- 18. What are the purposes for collecting and using data in Quality First?
 - a. [IF NOT MENTIONED, PROBE FOR]: on-going monitoring, case management, program improvement, state and federal reporting requirements
- 19. Do you think that Quality First staff has a good understanding of why they are required to collect certain data?
 - a. [IF NOT MENTIONED, PROBE FOR]: Coaches, Assessors, First Things First staff
- 20. What challenges do you think "on-the-ground" Quality First staff faces in collecting data?
 - a. Probe for: Assessors, Coaches, Health Consultants
 - b. How do you think Quality First staff approach ensuing data quality?
- 21. What challenges do you think Quality First participants (i.e., ECE programs) face in entering data and using the Extranet data system?
- 22. How are programs that are participating in Quality First engaged in the data collection process?
 - a. What information is shared with Quality First participants about the data collection process?
 - i. How is that information shared and who shares it?
 - b. Do you think they have a good understanding of what data are being collected about their program and how it is being used?

Closing	
Closing	
23. Is there anything additional you would like me to know about data collection, management or use in	1
Quality First?	

Data System (Extranet) Focus Group Protocol

- 1. Describe the types of Quality First data or information you collect or manage on a regular basis.
- 2. How do you use this data in your job?
- 3. Are there other data you are not currently collecting that you think you should be?
 - a. How would collecting this other data help you in your work?
- 4. What do you think is working well about the hardware, software and the Extranet data system used in Quality First?
- 5. What improvements could be made to these technologies to improve implementation of Quality First?
- 6. How do you ensure the data that are entered are accurate, that is, data are recorded correctly into the Extranet?
- 7. How could the quality of how these data are collected and managed be improved?
- 8. Do you have a good good understanding of why you are required to collect certain data?
 - a. What do you see as the primary purposes of collecting this data? For example, case management, rating, program improvement, and improvement of Quality First itself.
- 9. Do you think Quality First participants have a good understanding of how the data they provide and is collected about their programs is used?
 - a. What challenges do you think Quality First participants face in entering data and using the Extranet data system?
- 10. What challenges do you think "on-the-ground" Quality First staff like yourself face in collecting data?
- 11. Are there additional data-related training or professional development would you like to receive?
- 12. What else would you like us to know about how you collect and use data in Quality First?

Data System (Extranet) Observation Protocol

Name:	-
Role:	-
Start Time:	
End Time:	-
Age range of children in classroom years	
Program Type:	
Goals/purpose of session:	

Appendix C: Quality First Logic Model

Outcomes

3. Key Outputs

5. Provider/Professional Outcomes Intermediate-term

6. Child Long-term Outcomes

- 3.1 Individualized guidance and support through on-site visits with targeted training and technical assistance.
- 3.2 Financial assistance to QF providers to support purchasing of materials, equipment and professional development.
- 3.3 Valid and reliable assessment tools for program evaluation that focus on the environment & adult-child interactions.
- 3.4 On-site and telephone guidance and consultation, offering staff training on health and safety issues.
- 3.5 Consultation on-site and through telephone support for staff to address children's social-emotional developmental needs.
- 3.6 Specialized services to support inclusive practices for children with developmental needs.
- 7 Financial assistance through scholarships for children at QF sites based on program size and star rating.
- 3.8 Financial assistance through scholarships for staff at QF sites pursuing higher education.

4.1 Quality Improvement and Rating plans developed to support improved practice.

4. Short-term

Outcomes

- 4.2 Incentives support overcoming barriers to quality improvement.
- 4.3 Coaching intensity levels determined to define level of support.
- 4.4 Supports offered in CCHC consultation models based on needs of the program.
- 4.5 Support for responsiveness to children's mental health needs.
- 4.6 Increased staff awareness of and preparedness for including children with identified developmental needs.
- 4.7 Scholarships are available to families based on program rating.
- 4.8 Continuing education scholarships offered to program staff.

- 5.1 Overall program quality increased, enhancing ability to meet children and family needs.
- 5.2 Improved supply of equipment and materials to support quality.
- 5.3 Star rating demonstrates a commitment to quality early care and education.
- 5.4 Improved health and safety practices.
- 5.5 Increased teacher sensitivity to and preparedness for the mental health needs of children and improved behavior management.
- 5.6 Improved inclusion of special needs children in quality, appropriate early education activities.
- 5.7 Scholarships offset the increased cost of high quality education so that quality care remains accessible for all families.
- 5.8 Increased education and knowledge of early care and education of staff members

Children demonstrate school readiness at kindergarten entry in the developmental domains of social-emotional, language and literacy, cognitive, and motor and physical.

Appendix D: First Things First Regions

Regional Partnership Councils
Cochise
Coconino
Cocopah Tribe
Colorado River Indian Tribes
East Maricopa
Gila
Gila River Indian Community
Graham/Greenlee
Hualapai Tribe
La Paz/Mohave
Navajo Nation
Navajo/Apache
Northwest Maricopa
Pascua Yaqui Tribe
Phoenix North
Phoenix South
Pima North
Pima South
Pinal
Salt River Pima-Maricopa Indian Community
San Carlos Apache
Santa Cruz
Southeast Maricopa
Southwest Maricopa
Tohono O'odham Nation
White Mountain Apache Tribe
Yavapai
Yuma

Appendix E: Detailed Description of the Validation Study Design and Procedures

Sample and Recruitment

As noted in the Study Design and Methodology section of the report, we used a mixed methodology for the validation study design. This included collecting observational data in a subset of Quality First programs, administering surveys to Quality First programs taking part in the observation as well as other Quality First participants, conducting secondary analyses of Quality First administrative data, and reviewing Quality First documents.

Sample Selection

For the collection of observational data in a subset of Quality First programs, we recruited fully enrolled and rated Quality First participants. For the center based sample, we sought to recruit 210 programs. Our final sample, however, fell short of this goal (n = 188) due to low agreement rate and some programs initially agreeing but later declining when it was too late to replace the sample. To obtain the sample of 188 center based participants, we randomly selected and contacted 40794 center-based programs from the list of 789 Quality First center-based participants from First Things First in November 2015. After the initially randomly selected group was contacted, the sample was below the target, so we randomly selected another 162 center-based programs (42 4-star programs, 20 5-star programs, and 100 2-star center-based programs) from the remaining Quality First population. Thus, the final sample of 188 resulted from attempting to recruit 569, for a response rate among center based programs of 33%. For the sample of family child care homes, we sought to recruit 30 1- and 2-star programs. Only 1- and 2- star programs were selected because First Things First collects CLASS in programs with higher star ratings, and there is no ECERS-3 equivalent for family child care homes. However, as with the centerbased sample, the final sample fell short of the goal (n = 17). To obtain the sample of 17 family child care homes, we contacted all 77 1- and 2-star Quality First family participants from First Things First. Thus, the final sample of 17 resulted from attempting to recruit 77, for a response rate among center based programs of 22%.

Recruitment of Programs

Recruitment for the observational data collection sample took place from January through March 2016 and from August through September 2016. Child Trends first contacted all 962 Quality First participants by emailing directors and owners a letter that provided them with information about the study, and letting them know they might be contacted by LMA. First Things First also sent out a letter to programs, encouraging them to participate in the study. Child Trends contracted with LeCroy & Milligan Associates,

⁹⁴ We were unable to obtain the needed school-district permission to recruit 13 of these programs, so they were never contacted. They are included in our response rate calculations because they were randomly selected.

Inc (LMA) a Tucson-based program evaluation firm, to recruit programs, hire field staff (i.e., classroom observers), and collect classroom observational data for this study. LMA followed up with programs by phone and email, reaching out to center directors, owners, and family child care providers. During the phone calls, the recruiters described the study in more detail, informing programs of its purpose and activities. Recruiters then asked the programs if they would like to voluntarily enroll in the study. For center-based programs with more than one preschool and toddler classroom, we asked center directors for the first names of their teachers. Then, classrooms were randomly selected to receive an observation based on the first letter of the teacher's name, going in alphabetical order. If a teacher declined to participate, then the next teacher on the list would be asked to participate. Classroom observations were conducted in one-third of classrooms, mirroring Quality First's selection process for rating assessment observations. If a program had both toddler and preschool classrooms, we randomly selected one-third of the classrooms from each age group to receive an observation.

Tribal participation

To recruit tribal programs for this study, our team worked with First Things First to send out information about the study, and ask tribal leadership for permission for their programs to participate. While all tribal programs received director and teacher surveys, there was an overall low response rate for tribal programs. Our team and First Things First leadership conducted several targeted additional outreach efforts to try and increase the number of participating programs, but the numbers remained low. In addition, First Things First worked to recruit tribal programs for classroom observations. After about 6 months of direct outreach by First Things First staff, three tribes agreed to participate in classroom observations, resulting in four classroom observations.

Programs participating in observational data collection

A total of 205 programs participated in the observational data collection for the validation study (88 one- and 2-star, 63 three-star, and 54 four- and five-star). Within each star-rating group, sites were selected at random from the full population of Quality First at the time of recruitment⁹⁵. However, when randomly selecting programs, we made sure that our sample reflected the Quality First population in terms of number of programs at each star level, geographic location (i.e., urban or rural), and program type (i.e., center-based or family child care). In addition, program characteristics were tracked closely throughout recruitment.

Table 4 in the report shows the distribution of programs in the final observational data sample of 205 programs by star rating and the types of assessment tools used. Table E-1 shows the program characteristics of this group.

⁹⁵ Power analyses using Optimal Design (Spybrook et al., 2011) were conducted and results suggested that a sample size of 70 center-based programs per group would be sufficient to detect at least a 0.47 standard deviation difference between groups on observed quality measures. Practical considerations make it more difficult to observe family child care programs, so the goal was a minimum of 30 programs.

Table E1. Frequencies of Program Characteristics in Observational Data Collection by Star Rating												
Star Rating	n	Location			Туре							
		Urban	Hybrid	Rural	Center	Home	Tribal	For Profit	School Based	Faith Based	Head Start	Accredited
1 Star	1	1	0	0	0	1	0	0	0	0	0	0
	0.5%	0.5%	0%	0%	0%	0.5%	0%	0%	0%	0%	0%	0%
2 Star	87	54	10	23	71	16	0	54	6	9	1	10
	42%	26%	5%	11%	35%	8%	0%	26%	3%	4%	0.5%	5%
3 Star	63	40	6	15	63	0	2	39	8	6	0	18
	31%	19%	3%	7%	31%	0%	1%	19%	4%	3%	0%	9%
4 Star	41	28	5	7	41	0	1	8	9	7	2	14
	20%	14%	2%	3%	20%	0%	0.5%	4%	4%	3%	1%	7%
5 Star	13	9	3	1	13	0	0	2	3	0	3	11
	6%	4%	1.5%	0.5%	6%	0%	0%	1%	1.5%	0%	1.5%	5%
TOTAL	205	132	24	46	188	17	3	103	26	22	6	53
% of n	100%	64%	12%	22%	92%	8%	1.5%	50%	13%	11%	3%	26%

Source: Child Trends classroom observation data, 2016

Field staff hiring and training

LMA hired 10 field staff (four ECERS-3, three for CLASS Pre-K, and three for CLASS Toddler observers) to conduct the classroom observations for the observational data collected as part of the validation study. Field staff were hired based on their experience in the early care and education field, experience conducting similar types of data collection, or past training on the observational tools. All field staff had background checks and were trained on the protection of human subjects, the child abuse and neglect protocol, and the classroom observation measures. In addition, Child Trends' staff trained the field staff on other data collection procedures, including recruitment of programs and scheduling observations, cleaning of data, and data entry into a web-based portal.

ECERS-3

Training included one day of web-based instruction from the ECERS-3 trainer, followed by one day inperson training conducted onsite at LMA with the field staff. Following the training, the ECERS-3 trainer went on practice observations with all the field staff/observers, conducting a minimum of two classroom observations with each observer. In addition, the ECERS-3 trainer worked specifically with one of the field staff to train her to become an anchor. The anchor was used to assess reliability among the whole ECERS-3 data collection team by going out on all reliability visits and double coding with the field staff. The anchor training included five practice observations with the trainer, with her scores matching the trainers within one scale point on 86% of the items for three of five observations, which is in alignment with the Environmental Ratings Scale Institute's (ERSI) requirements of 85% reliability. By the end of February 2016, all other ECERS-3 field staff were trained to reliability by either the ECERS-3 trainer or the anchor. To ensure ongoing interrater reliability on the ECERS-3, all field staff were required to conduct practice observations, with 10% of the ECERS-3 observations with field staff maintaining an average reliability rate of 92% within one scale point over the course of data collection. If an ECERS-3 observer did not reach at least 85% within one scale point reliability with the anchor, the observer met

with ECERS-3 trainer to go over the assessment results, and then was required to go out on additional practice observations until she was reliable. In addition, the ECERS-3 trainer reviewed and scored all the ECERS-3 interrater reliability observations to ensure reliability was being met.

ECERS-3 data collection protocol

For this study, field staff worked with directors or classroom teachers to schedule their observations for a typical day (i.e., one without any unusual activities or circumstances). Observations generally began at 8:30 a.m.; if the center opened after 8:30 a.m. then the data collector would arrive 15 minutes after the center opened. Field staff observed the classroom for 3 to 4 hours, including time to review classroom and playground materials. Our team completed a total of 211 ECERS-3 observations as part of this study. One third of these observations (n = 71) were conducted during spring 2016. The remaining observations were conducted during fall 2016, due to all 3-, 4-, and 5-star programs being observed during the fall data collection period. ECERS-3 scores are derived by scoring a series yes/no indicators. The pattern of responses is used to score 7-point items, and the final scores is the average of those 7-point items.

CLASS

In January 2016, the CLASS trainer conducted a three day in-person training at the LMA offices for all the CLASS field staff (CLASS Pre-K and CLASS Toddler). Each observer had to meet publisher and author reliability standards of at least 85% within one point before being allowed to collect data in the field. This included watching and conducting practice scoring on CLASS training videos. Reliability was checked for 10% of all CLASS observations, with CLASS Pre-k observers maintaining an average reliability rate of 95% and CLASS Toddler observers maintaining an average reliability rate of 94% over the course of data collection. Calibration videos were utilized and regular fielding check-ins were held, to address questions in the field and get feedback from tool authors and trainers as needed.

Over the course of the data collection window, LMA lost two CLASS Pre-k field staff. To fill these gaps, LMA hired two additional field staff to finish up the remaining classroom observations. One of the observers was already trained and certified on the CLASS Pre-k tool, so she just completed a reliability check with another observer on the team. The second observer attended an in-person Teachstone training on the CLASS Pre-k and went through the standard reliability training, including a reliability check with another observer in the field, before collecting data for the project.

CLASS data collection protocol

For this study, field staff worked with directors or classroom teachers to schedule their observations for a typical day (i.e., one without any unusual activities or circumstances). Observations generally began at 8:30 a.m.; if the center opened after 8:30 a.m. then the data collector would arrive 15 minutes after the center opened. Field staff observed the classroom for 20 minutes at a time, and each 20-minute period was followed by a 10-minute coding session. Depending on the classroom's daily schedule, either four or five 30-minute observation cycles were conducted for each classroom that was observed. Our team completed a total of 77 CLASS Pre-K and 72 CLASS Toddler observations as part of this study. Most of these observations (n = 72 Pre-k and n = 65 Toddler) were conducted during spring 2016. The additional

observations were conducted during fall 2016 due to lead teacher absences or other scheduling conflicts in the spring. For both the preschool and toddler versions, scores are derived by first averaging together the values on each dimension, across the cycles. Next, the dimensions are averaged together to create the domain scores.

Data available for analysis

This report includes Quality First administrative data, observational data collected in a subset of Quality First programs, and director and teacher surveys administered to Quality First participants.

The validation study included Quality First participants who were fully enrolled in Quality First and had a verified rating. At the time of recruitment into the study (February 2016), there were a total 931 Quality First participants (31 programs were pending verification and were not included in the count). Later, at the time when we did our analyses, 25 programs that were pending verification gained a star rating, and 97 additional new programs became enrolled participants in Quality First. We then removed 131 programs from the sample because they were not fully enrolled, with a verified rating (i.e., 75 programs were eliminated because they declined participation in Quality First after receiving their initial rating, 47 were removed because they participated on a ratings-only basis, and another 9 programs were removed because they were still pending verification). Therefore, our total sample included 922 programs that were fully enrolled and had a verified rating.

Appendix F: Further Analyses Examining the Association Among Quality Elements

Table F-1 displays the Cronbach's Alpha coefficient when individual quality elements are removed. This analysis helps identify the extent to which quality elements scores hang together differ when one quality element is excluded. Results indicate that removing any of the elements typically lowers the alpha. Although the removal of the CLASS Instructional Support element improves the alpha coefficient, the change is small (.02).

Table F-1. Cronbach's alpha when quality elements are removed (n = 323)		
Quality Element	Alpha When Quality Element Is Removed	
ERS Total Score	0.66	
CLASS Emotional Support	0.63	
CLASS Classroom Organization	0.64	
CLASS Instructional Support	0.72	
QFPS Staff Qualifications	0.69	
QFPS Administrative Practices	0.68	
QFPS Curriculum and Assessment	0.67	

Data sources: Child Trends classroom observation data collection, 2016; Quality First Administrative data, 2017

Appendix G: Pairwise Comparison Statistics of Quality Element Differences Across Star Rating Levels

After conducting an overall test examining whether quality elements varied by star level, additional analyses were conducted to determine which specific star rating levels were significantly different from each other. Table G-1 presents the statistical findings for each of these paired comparisons.

	CLASS ES	CLASS CO	CL ACC IC	rnc -	OEDS SO	OFDS AD	OFDS CA
	CLASS ES	CLASS CO	CLASS IS	ERS	QFPS SQ	QFPS AP	QFPS CA
All Programs	(n = 664)	(n=594)	(n=664)	(n=728)		(n=605)	
1- and 2-star vs. 3-star	F (1, 662) = 261.64***	F (1, 592) = 107.67***	F (1, 662) = 5.39*	F (1, 726) = 150.03***	F (1, 603) = 81.96***	F (1, 603) = 60.61***	F (1, 603) = 128.38***
1- and 2-star vs. 4- and 5-star	F (1, 662) = 372.37***	F (1, 592) = 199.18***	F (1, 662) = 27.62***	F (1, 726) = 601.37***	F (1, 603) = 181.57***	F (1, 603) = 120.21***	F (1, 603) = 260.38***
3 star vs. 4- and 5-star	F (1, 662) = 38.74***	F (1, 592) = 48.56***	F (1, 662) = 155.43***	F (1, 726) = 214.94***	F (1, 603) = 56.90***	F (1, 603) = 30.20***	F (1, 603) = 68.60***
Center-Based Programs	(n = 564)	(n=556)	(n=564)	(n=596)		(n=509)	
1- and 2-star vs. 3-star	F (1, 562) = 262.71***	<i>F</i> (1, 554) 108.51***	F (1, 562) = 3.7 NS	F (1, 594) = 118.69***	F (1, 507) = 60.38***	F (1, 507) = 53.36***	F (1, 507) = 107.48***
1- and 2-star vs. 4- and 5-star	F (1, 562) = 357.90***	F (1, 554) = 194.15***	F (1, 562) = 33.01***	F (1, 594) = 442.18***	F (1, 507) = 161.34***	F (1, 507) = 118.01***	F (1, 507) = 233.07***
3 star vs. 4- and 5-star	F (1, 562) = 31.62***	F (1, 554) = 45.11***	F (1, 562) = 159.33***	F (1, 594) = 156.06***	F (1, 507) = 66.87***	F (1, 507) = 36.08***	F (1, 507) = 68.72***
Family Child Care Programs	(n = 100)	(n=38)	(n=100)	(n-132)		(n=96)	
1- and 2-star vs. 3-star	F (1, 98) = 15.57***	F (1, 36) = 3.09 NS	F (1, 98) = 1.57 NS	F (1, 130) = 31.03***	F (1, 94) = 32.82***	F (1, 94) = 7.03**	F (1, 94) = 23.63***
1- and 2-star vs. 4- and 5-star	F (1, 98) = 29.70***	F (1, 36) = 9.15**	F (1, 98) = 0.5 NS	F (1, 130) = 175.76***	F (1, 94) = 30.97***	F (1, 94) = 4.76*	F (1, 94) = 35.05***
3 star vs. 4- and 5-star	F (1, 98) = 6.97**	F (1, 36) = 3.3NS	F (1, 98) = 10.37**	F (1, 130) = 66.69***	F (1, 94) = 0.02 NS	F (1, 94) = 0.61 NS	F (1, 94) = 4.16*

Source: Quality First administrative data, 2017. Note: * Differences significant at the p < .05 level, ** Differences significant at the p < .01 level, *** Differences significant at the p < .001 level, NS Differences not significant

Appendix H: Crosswalk between Quality First Point Scale Components and Survey Items

As part of the validation study, we developed a survey for directors and teachers. One of the goals of the surveys was to obtain information about 1- and 2-star programs related to the three domains of the QFPS (i.e., Staff Qualifications, Administrative Practices, and Curriculum and Assessment), as programs are only assessed using the QFPS when they attempt to be rated at the 3-, 4- and 5-star levels. Tables H-1 though H-3 provide crosswalks comparing the QFPS domain criteria to their corresponding director and teacher survey items.

Table H-1.	Table H-1. STAFF QUALIFICATIONS QFPS criteria cross-walked with Child Trends' director and teacher survey questions			
Original QFPS Requirements		ents	Child Trends Survey Rubric	
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options	
		2	Points	
Experience	Administrators (Director and Assistant Director) and Teachers: 25% have one year of teaching in or administration of an early care and education program	One year of experience in an early care and education program	D4 ⁹⁶ . Including time spent as a teacher, assistant teacher, director, coordinator, or other professional, how many years have you worked with young children (birth to age 8)? a. Less than 1 year b. 1-2 years c. 2-5 years d. 5-8 years e. 8-10 years f. Over 10 years g. Over 15 years h. Over 20 years T4 ⁹⁷ . Including time spent as a teacher, assistant teacher, director, coordinator, or other professional, how many years have you worked with young children (birth to age 8)?	

⁹⁶ Director survey item

⁹⁷ Teacher survey item

Original QFPS Requirements		ents	Child Trends Survey Rubric	
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options	
	AND Assistant Teachers: 50% have 6 months of experience working in an early care and education program	N/A	N/A – Assistant Teachers were not surveyed	
Education	AND Administrators (Director and Assistant Director) and Teachers: 25% have 12 college credit hours in early childhood or related fields listed in the documentation requirements section OR Certificate of completion in ECE or child development from a community college OR a CDA	AND Have 6 college credit hours in early childhood or related fields listed in the documentation requirements section OR a certificate of completion in ECE or child development from a community college OR a CDA	D/T27. What is the highest level of education you have attained? a. High School Diploma or GED b. Some college, but no degree c. Associate degree d. Associate degree in Early Childhood or related field e. Bachelor's Degree f. Bachelor's Degree in Early Childhood or related field g. Graduate Degree h. Graduate Degree in Early Childhood or related field D/T28. Which of the following credentials have you attained? a. CDA (Child Development Associate) b. AMI/AMS Credential c. State of Arizona Teaching Certificate in Early Childhood Education d. State of Arizona Teaching Certificate in Early Childhood Special Education with ECE endorsement e. State of Arizona Teaching Certificate in Elementary Education with ECE endorsement f. Other, please describe	

Original QFPS Requirements		ents	Child Trends Survey Rubric	
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options	
		4	Points	
Experience	Administrators (Director and Assistant Director) and Teachers: 75% have 1 year of teaching in or administration of an early care and education program.	1 year of experience in an early care and education program	D4. Including time spent as a teacher, assistant teacher, director, coordinator, or other professional, how many years have you worked with young children (birth to age 8)? a. Less than 1 year b. 1-2 years c. 2-5 years d. 5-8 years e. 8-10 years f. Over 10 years g. Over 15 years h. Over 20 years T4. Including time spent as a teacher, assistant teacher, director, coordinator, or other professional, how many years have you worked with young children (birth to age 8)?	
	AND Assistant Teachers: 50% have 6 months of experience working in an early care and education program	N/A	N/A – Assistant Teachers were not surveyed	

	Original QFPS Requirem	ents	Child Trends Survey Rubric	
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options	
Education	AND Administrators (Director and Assistant Director) and Teachers: 25% have 12 college credit hours in early childhood or related fields listed in the documentation requirements section OR a certificate of completion in ECE or child development from a community college or a CDA; AND 50% have an AA or AAS in ECE OR AA or AAS that includes at least 15 college credit hours in early childhood or related fields listed in the documentation requirements section	AND 12 college credit hours in early childhood or related fields listed in the documentation requirements section OR a certificate of completion in ECE or child development from a community college OR a CDA	D/T27. What is the highest level of education you have attained? a. High School Diploma or GED b. Some college, but no degree c. Associate degree d. Associate degree in Early Childhood or related field e. Bachelor's Degree f. Bachelor's Degree in Early Childhood or related field g. Graduate Degree h. Graduate Degree h. Graduate Degree in Early Childhood or related field D/T28. Which of the following credentials have you attained? a. CDA (Child Development Associate) b. AMI/AMS Credential c. State of Arizona Teaching Certificate in Early Childhood Education d. State of Arizona Teaching Certificate in Early Childhood Special Education with ECE endorsement e. State of Arizona Teaching Certificate in Elementary Education with ECE endorsement f. Other, please describe	

Table H-1.	Table H-1. STAFF QUALIFICATIONS QFPS criteria cross-walked with Child Trends' director and teacher survey questions			
	Original QFPS Requirements		Child Trends Survey Rubric	
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options	
		6	Points	
Experience	Administrators (Director and Assistant Director) and Teachers: Those meeting the education requirement have 6 months of teaching in an early care and education program	1 year of experience in an early care and education program	D4. Including time spent as a teacher, assistant teacher, director, coordinator, or other professional, how many years have you worked with young children (birth to age 8)? a. Less than 1 year b. 1-2 years c. 2-5 years d. 5-8 years e. 8-10 years f. Over 10 years g. Over 15 years h. Over 20 years T4. Including time spent as a teacher, assistant teacher, director, coordinator, or other professional, how many years have you worked with young children (birth to age 8)?	

Original QFPS Requirements		nents	Child Trends Survey Rubric
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options
	AND those NOT meeting the education requirement: The remaining percentage of teachers meets the experience requirements at the 2 point level.	N/A	D4. Including time spent as a teacher, assistant teacher, director, coordinator or other professional, how many years have you worked with young children (birth to age 8)? a. Less than 1 year b. 1-2 years c. 2-5 years d. 5-8 years e. 8-10 years f. Over 10 years g. Over 15 years h. Over 20 years T4. Including time spent as a teacher, assistant teacher, director, coordinator or other professional, how many years have you worked with young children (birth to age 8)? years months
	Assistant Teachers: 50% have 6 months of experience working in an early care and education program	N/A	N/A – Assistant Teachers were not surveyed

Original QFPS Requirements		ents	Child Trends Survey Rubric
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options
Education	Administrators (Director and Assistant Director) and Teachers: 25% have a BA or BS in ECE or related field OR State of AZ Provisional/Standard Teaching Certificate in Early Childhood Education OR State of AZ Provisional/Standard Teaching Certificate in Early Childhood Special Education with ECE endorsement OR State of AZ Provisional/Standard Teaching Certificate in Elementary Education with ECE endorsement	EAA or AAS in ECE OR AA or AAS that includes at least 15 college credit hours in early childhood or related fields listed in the documentation requirements section OR a BA or BS in any field w/at least 15 college credit hours in early childhood or related fields listed in the documentation requirements section	D/T27. What is the highest level of education you have attained? a. High School Diploma or GED b. Some college, but no degree c. Associate degree d. Associate degree in Early Childhood or related field e. Bachelor's Degree f. Bachelor's Degree in Early Childhood or related field g. Graduate Degree h. Graduate Degree in Early Childhood or related field D/T28. Which of the following credentials have you attained? a. CDA (Child Development Associate) b. AMI/AMS Credential c. State of Arizona Teaching Certificate in Early Childhood Education d. State of Arizona Teaching Certificate in Early Childhood Special Education with ECE endorsement e. State of Arizona Teaching Certificate in Elementary Education with ECE endorsement

	Original QFPS Requirem	ents	Child Trends Survey Rubric
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options
		2	Points
Ratios and Group Size	Group sizes are a maximum of no more than two times the ratio of children per a single adult: Infants 1:5, max or 10 children 12-24 months 1:6, max of 12 children	Ratios and group sizes are the following: Up to 5 children enrolled 1:5, max of 5 children 6-10 children enrolled	D12. What are your program's maximum ratios and group sizes for each age group served? Infants D12. What are your program's maximum ratios and group sizes for each age group served? 12-24 months D12. What are your program's maximum ratios and group sizes for each age group served? 2-year-olds D12. What are your program's maximum ratios and group sizes for each age
Gloup Size	2-year-olds 1:8, max of 16 children 3-year-olds 1:13, max of 26 children 4- and 5-year-olds 1:15, max of 30 children	1:5, max of 10 children	group served? 3-year-olds D12. What are your program's maximum ratios and group sizes for each age group served? 4-5-year-olds
Staff Retention	In the past 2 years, the retention rate for Director, Assistant Director, and Lead	In the past 2 years, the retention rate for providers does not fall	D9. How many staff (including directors, assistants, teachers, other classroom support staff, etc.) in your program have left in the last 2 years? (enter numeric digits only)
Retention	Teachers does not fall below 60%	below 60%	Administrative data on # of teachers in program
		4	Points
	Group sizes are the following: Infants 1:5, max of 10 children 12-24 months 1:6, max of 12	Ratios and group sizes are the following:	D12. What are your program's maximum ratios and group sizes for each age group served? Infants D12. What are your program's maximum ratios and group sizes for each age
Ratios and Group Size	children 2-year-olds 1:8, max of 16 children	Up to 5 children enrolled 1:5, max of 5 children	group served? 12-24 months D12. What are your program's maximum ratios and group sizes for each age group served? 2-year-olds
	3-year-olds 1:12, max of 24 children	6-10 children enrolled 1:5, max of 10 children	D12. What are your program's maximum ratios and group sizes for each age group served? 3-year-olds
	4- and 5-year-olds 1:15, max of 26 children		D12. What are your program's maximum ratios and group sizes for each age group served? 4- and 5-year-olds

Original QFPS Requirements			Child Trends Survey Rubric	
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options	
Staff Retention	In the past 2 years, the retention rate for Director, Assistant Director, and Lead Teachers does not fall below 65%	In the past 2 years, the retention rate for Family Child Care providers does not fall below 65%	D10. How many teachers in your program have left in the last 2 years? (ente numeric digits only) Administrative data on # of teachers in program	
		6	Points	
Ratios and Group Size	Ratios and Group sizes meet the following: Infants 1:4, max of 8 children 12-24 months 1:4, max of 8 children 2-year-olds 1:6, max of 12 children 3-year-olds 1:9, max of 18 children 4- and 5-year-olds 1:10, max of 20 children	Ratios and group sizes are the following: Up to 5 children enrolled 1:4, max of 5 children 6-10 children enrolled 1:4 max of 10 children	D12. What are your program's maximum ratios and group sizes for each age group served? Infants D12. What are your program's maximum ratios and group sizes for each age group served? 12-24 months D12. What are your program's maximum ratios and group sizes for each age group served? 2-year-olds D12. What are your program's maximum ratios and group sizes for each age group served? 3-year-olds. D12. What are your program's maximum ratios and group sizes for each age group served? 4- and 5-year-olds	
Staff Retention	In the past 3 years, the retention rate for all classroom staff does not fall below 65%	In the past 3 years, the retention rate for all FCC staff does not fall below 65%	D10. How many teachers in your program have left in the last 3 years? (entenumeric digits only) Administrative data on # of teachers in program	

Original QFPS Requirement			Child Trends Survey Rubric				
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options				
		2	Points				
State Standards	Teachers, Directors, and Assistant Directors have completed the approved two- hour training on the Introduction to the Arizona Early Learning Standards (AZELS) and infant - Toddler Developmental Guidelines (ITDG) OR A valid Arizona Early Childhood Teaching Certificate or Endorsement is accepted in lieu of training (teachers only)	Providers have completed the approved two-hour training on the Introduction to the Arizona Early Learning Standards (AZELS) and infant - Toddler Developmental Guidelines (ITDG) OR A valid Arizona Early Childhood Teaching Certificate or Endorsement is accepted in lieu of training (teachers only)	T8. Do you have any of the following certificates or credentials? (Please sele all that apply) a. CDA (Child Development Associate) b. AMI/AMS Credential c. State of Arizona Teaching Certificate in Early Childhood Education d. State of Arizona Teaching Certificate in Early Childhood Special Education with ECE endorsement e. State of Arizona Teaching Certificate in Elementary Education with ECE endorsement f. None of the above				
Curriculum	AND the Arizona Early Learning Standards and Infant-Toddler Development Guidelines are clearly reflected in the written activity plans	AND the Arizona Early Learning Standards and Infant-Toddler Development Guidelines are clearly reflected in the written activity plans	D16. Please rate how often the Arizona Early Learning Standards (AZELS) are clearly reflected in your program's written activity/lesson plans (i.e., each lesson plan refers to or identifies at least one AZELS that will be addressed by the activity): a. Never b. Sometimes c. Most of the time d. Always e. I don't know				

	Original QFPS Requirem	ent	Child Trends Survey Rubric				
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options				
			T. Please rate how often the Arizona Early Learning Standards (AZELS) are clearly reflected in your written activity/lesson plans (i.e., each lesson plan refers to or identifies at least one AZELS that will be addressed by the activity)				
			T. Please rate how often the Infant-Toddler Development Guidelines are clearly reflected in your written activity/lesson plans.				
	AND there is a written process for sharing curriculum with families	AND there is a written process for sharing curriculum with families	D17. Does your program have a written process for sharing curriculum with families (this is a statement or policy that describes how your program informs families of what their children are learning or identifies the curriculum used)? a. Yes b. No				
Assessment	AND Assessment of children's growth and development is an ongoing process and is conducted during children's daily activities and routines to assess progress in the 4 domain areas of social, emotional, cognitive and physical	AND Assessment of children's growth and development is an ongoing process and is conducted during children's daily activities and routines to assess progress in the 4 domain	D21. Does your program use a tool to conduct regular child assessments for infants and toddlers? a. Yes b. No D22. Does your program use a tool to conduct regular child assessments for preschoolers? a. Yes b. No				
	development	areas of social, emotional, cognitive and physical development	If YES: How often does your program collect child assessment data for infants and toddlers? a. Never b. Quarterly c. Monthly d. Weekly e. Daily				

	Original QFPS Requirem	ent	Child Trends Survey Rubric				
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options				
	AND Parent teacher conferences are offered once per year	AND Parent teacher conferences are offered once per year	D/T25. How often does your program offer parent/teacher conferences? a. My program does not offer parent/teacher conferences on a regular basis b. Once a year c. Twice a year or more d. Other, please specify				
		4	Points				
State Standards	Programs follow the Arizona Program Guidelines for High Quality Early Education Birth through Kindergarten; recommendation for transitions between environments	Programs follow the Arizona Program Guidelines for High Quality Early Education Birth through Kindergarten; recommendation for transitions between environments	Not asked in the surveys				
Curriculum	AND Written curriculum plans include specific learning objectives for children based on each child's documented or observed assessment information	AND Written curriculum plans include specific learning objectives for children based on each child's documented or observed assessment information	D18. Does your program's written curriculum plans include specific learning objectives for children based on each child's documented or observed assessment information? a. Yes b. No				

	Original QFPS Requirem	ent	Child Trends Survey Rubric					
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options					
Assessment	AND Assessment of children's growth and development includes gathering and documenting information received from families either from child information surveys, daily communications with families, or formal conferences held with the families AND Programs use a variety of methods that include observation/anecdotal notes, children's work samples, developmental		T30. Outside of formal family-teacher conferences, how often do you share children's growth and development progress with families in your classroom. Not asked in the surveys					
		61	Points					
State Standards	Teachers, Directors, and Assistant Directors have completed the approved training on at least two of the modules of the Arizona early learning Standards or Infant - Toddler Development Guidelines	Teachers, Directors, and Assistant Directors have completed the approved training on at least two of the modules of the Arizona early learning Standards or Infant - Toddler Development Guidelines	Not asked in the surveys					

	Original QFPS Requiren	nent	Child Trends Survey Rubric				
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options				
	OR A valid Arizona Early Childhood Teaching Certificate or Endorsement is accepted in lieu of training (teachers only)	OR A valid Arizona Early Childhood Teaching Certificate or Endorsement is accepted in lieu of training (teachers only)	T8. Do you have any of the following certificates or credentials? (Please select all that apply) a. CDA (Child Development Associate) b. AMI/AMS Credential c. State of Arizona Teaching Certificate in Early Childhood Education d. State of Arizona Teaching Certificate in Early Childhood Special Education with ECE endorsement e. State of Arizona Teaching Certificate in Elementary Education with ECE endorsement f. None of the above g. Other, please describe				
Curriculum	AND Written activity plans includes strategies, modifications, and/or adaptations to fully involve all children with special health and/or developmental needs, including gifted and talented OR this item may be N/A if no children with special health and/or developmental needs are enrolled	AND Written activity plans includes strategies, modifications, and/or adaptations to fully involve all children with special health and/or developmental needs, including gifted and talented OR this item may be N/A if no children with special health and/or developmental needs are enrolled	D19. Do your program's written curriculum plans allow for individual modifications based on a child's particular needs or skills? a. Yes b. No D20. Does your program's written curriculum plans include strategies, modifications, and/or adaptations to fully involve children with special health or developmental needs? a. Yes b. No T26. Please rate how often your written activity/lesson plans include modifications, strategies, and/or adaptations to fully involve all children with special health or developmental needs.				

Table H-3. CURRICULUM AND ASSESSMENT QFPS criteria cross-walked with Child Trends' director and teacher survey questions							
	Original QFPS Requirem	ent	Child Trends Survey Rubric				
Domain Area	Center-based Programs	Family Child Care Programs	Corresponding survey questions and response options				
Assessment	AND Additional child assessment strategies include developmental and sensory screening activities (either provided directly or arranged for by the provider) AND, when necessary, families are referred to appropriate health or intervention agencies	AND Additional child assessment strategies include developmental and sensory screening activities (either provided directly or arranged for by the provider) AND, when necessary, families are referred to appropriate health or	26. Does your program provide or arrange for developmental screenings (e.g. vision, hearing, etc.) for the children in your program? a. Yes b. No Not asked in the surveys				
	AND Parent teacher conferences are offered twice per year	intervention agencies AND Parent teacher conferences are offered twice per year	P/T25. How often does your program offer parent/teacher conferences? a. My program does not offer parent/teacher conferences on a regular basis b. Once a year c. Twice a year or more d. Other, please specify				

Appendix I: Multiple Regression Statistics Assessing the Variance in Star Ratings Explained by Quality First Quality Elements

Table I-1. Percent of Variance Explained by All Quality Elements					
R-Square 0.5842					
Adjusted R-Square	0.5749				

Source: Quality First administrative data, 2017

Table I-2. Percent of Variance Explained by Each Individual Quality Element								
Source	df	Type III Sum of Squares (SS)	Mean Square	F Value	p value	% of Corrected Total SS	% of Model SS	
ERS Total Score	1	12.511592	12.51159	102.55	<.0001	14%	23%	
CLASS Emotional Support	1	0.2570112	0.257011	2.11	0.1477	0%	0%	
CLASS Classroom Organization	1	0.1553798	0.15538	1.27	0.26	0%	0%	
CLASS Instructional Support	1	9.375322	9.375322	76.84	<.0001	10%	18%	
QFPS Staff Qualifications	1	0.9516139	0.951614	7.8	0.0055	1%	2%	
QFPS Administrative Practices	1	0.7082657	0.708266	5.81	0.0166	1%	1%	
QFPS Curriculum and Assessment	1	1.1378809	1.137881	9.33	0.0025	1%	2%	

Source: Quality First administrative data, 2017