Wilder Research, Child Trends, SRI International,
and Center for Early Education and Development,
University of Minnesota.

Evaluation of Parent Aware: Minnesota's Quality Rating and Improvement System Pilot

Final Evaluation Report
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Prepared by:

Kathryn Tout, Rebecca Starr,
Tabitha Isner, Jennifer Cleveland,
Ladia Albertson-Junkans,
Margaret Soli and Katie Quinn

Child Trends®

708 North First Street, Suite 333 Minneapolis MN 55401 612-331-2223

www.childtrends.org

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The Evaluation Team has benefitted greatly from interactions with colleagues at Mathematica Policy Research who conducted the Quality Rating System Assessment project and through collaborations with national colleagues participating in the Quality Initiatives Research and Evaluation Consortium (INQUIRE). These researchers are participating in evaluations of Quality Rating and Improvement Systems in other states across the country and have offered valuable input and wisdom about their experiences and research findings.

We are grateful for the participants in Parent Aware – directors, teaching staff, and family child care providers – who work each day on behalf of children and families in Minnesota. We appreciate their willingness to share information and perceptions with us and to welcome us as we visited their programs, classrooms and homes. Finally, we are indebted to the parents and children who took part in the research. Their contributions have resulted in new knowledge about Quality Rating and Improvement Systems that can be used to inform decisions and recommendations in Minnesota and nationally.

Parent Aware At a Glance…

What is Parent Aware?

Parent Aware is a voluntary quality rating and improvement system (QRIS) for early care and education programs including licensed family child care programs, child care centers, Head Start, and School Readiness programs. It is being piloted in four Minnesota communities/areas including the city of Minneapolis, the city of Saint Paul, the Wayzata school district, and Blue Earth and Nicollet Counties.

The primary purpose of Parent Aware is to support parents by providing information about the quality of early care and education programs. Parent Aware uses ratings to recognize quality and promotes quality improvement using a variety of resources. Together, these strategies aimed at parents and early care and education programs target an ultimate goal of improving children's school readiness.

How are ratings assigned to early care and education programs?

Programs provide evidence of their quality and earn points in four areas:

- Family Partnerships
- Teaching Materials and Strategies
- Tracking Learning
- Teacher Training and Education

Programs submit documentation and supporting materials for each area. They receive an on-site observation and are scored on nationally-recognized scales that measure their environment, practices and interactions with children. They are assigned one to four stars depending upon the number of points earned.

Accredited child care centers, accredited family child care programs, School Readiness Programs and Head Start programs are awarded a 4-star rating automatically if they demonstrate current accreditation status, compliance with licensing, or compliance with applicable state or federal program performance standards.

How do parents learn about the ratings?

Ratings are posted on the Parent Aware website (www.parentawareratings.org). Parents can search for programs by pilot area and in a variety of languages including English, Hmong, Spanish, and Somali. They can also call their local child care resource and referral agency for assistance.

What information has been learned from the evaluations of Parent Aware?

Evaluation reports have been produced by Child Trends for each year of the pilot. The reports and two-page fact sheets can be found at: http://tinyurl.com/melfreports

OVERVIEW AND PURPOSE OF THE REPORT

Minnesota's pilot Quality Rating and Improvement System (QRIS) – Parent Aware – completed its fourth and final pilot year at the end of June, 2011. A QRIS is a strategy used by over half of the states to measure, rate and communicate information about the quality of early care and education programs. To date, Parent Aware is the only QRIS nationally that includes the term "parent" in its name. Throughout the pilot, an intentional focus has been placed on developing and promoting a rating tool that will be useful to parents and that will support their early care and education decisions. Similar to other QRIS, Parent Aware also promotes program quality improvement by providing on-site support and by linking programs to training and other resources. This two pronged strategy aimed at parents and at early care and education programs targets the ultimate goal of improving children's school readiness, particularly for those who are at-risk of beginning kindergarten behind their peers.[1] The purpose of this final report of the pilot is: (1) to provide an assessment of Parent Aware and its outcomes at the end of the pilot, and (2) to use the results of the evaluation to inform planning for the next phase of Parent Aware implementation.

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

The previous evaluation reports focused on early implementation and initial outcomes of the Parent Aware pilot.[2]

- The Year One report presented stakeholder perceptions of the potential of Parent Aware to achieve its goals.[3] Early in the pilot, stakeholders generally believed that Parent Aware had the potential to improve quality and the information about early care and education available for parents. Concern was expressed by stakeholders about the challenges of engaging providers and parents, providing adequate supports for quality improvement, and recruiting and rating culturally and linguistically diverse providers. In Year One, it

[1] Appendix A provides details about how Parent Aware was structured in the final year of the pilot. The three previous Evaluation reports also have details about Parent Aware and the contextual factors that were notable in each year of the pilot.

[2] For a link to the three previous Parent Aware Evaluation reports, see the Parent Aware at a Glance box before this section.

[3] Parent Aware stakeholders interviewed for the Year One and the Year Two reports include members of the Parent Aware Implementation Team, which is comprised of staff from agencies and organizations directly responsible for the day-to-day operation of the program (e.g. staff from the Minnesota Department of Human Services, the Minnesota Child Care Resource and Referral Network, Resources for Child Caring, Child Care Resource and Referral Inc., and the Assessment and Training Center at the University of Minnesota), staff from early care and education programs eligible for or participating in Parent Aware, staff from organizations that provide services for parents and/or provide supports for early care and education programs, legislators, and staff from the Minnesota Early Learning Foundation.

was clear that the automatic rating process in place for accredited programs (as well as Head Start/Early Head Start and School Readiness[4] programs) facilitated participation in Parent Aware. Nearly 87% of the 237 rated programs in November, 2008 had received automatic ratings.

- The Year Two report covered the next 18 months of the pilot. By December, 2009, the number of rated programs in Parent Aware increased by 34%. Parent Aware had rated 318 programs that were serving over 20,000 children in the Parent Aware pilot areas. One-quarter of the programs had received ratings through the full (non-automatic) rating process, and 12% of fully-rated programs were family child care providers who were English Language Learners, a high priority group for Parent Aware. Among the over 30 programs that were re-rated after being in Parent Aware for one year, the majority (82% of center-based programs and 90% of family child care programs) increased their star rating. Over 50% of re-rated programs moved to a 4-star rating. Stakeholders reported that Parent Aware had been successful in bringing the issue of quality to the forefront among programs and policymakers. Among parents with children in Parent Aware-rated programs, about 20% of parents said they had heard of Parent Aware; stakeholders noted that additional outreach with parents was necessary. A radio campaign early in 2010 generated a 300% increase in traffic to the Parent Aware website, but traffic decreased after the radio campaign ended. Looking ahead to statewide implementation, stakeholders reflected on the need to build capacity for quality improvement supports, continue outreach and marketing efforts, and to consider how Parent Aware should be tailored to meet the needs of different geographical areas and different settings.

- The Year Three report covered the third year of the pilot. By September, 2010, there were 339 rated programs serving nearly 22,000 children in the Parent Aware pilot areas. The majority of programs received a 3- or 4-star full rating or an automatic 4-star rating. Analysis of the Rating Tool indicated that programs scored highest in the Family Partnerships category and lowest in Teaching Materials and Strategies and Tracking Learning categories. An examination of the measures of observed quality revealed that programs could receive a 4-star rating even with scores in the minimal range on the observational measures (the Environment Rating Scales and the Classroom Assessment Scoring System), a finding which reflects the intentional underweighting of the observational measures in the Parent Aware Rating Tool. Initial "validation analyses" were conducted to examine whether and to what extent the Parent Aware Rating Tool is designating quality levels that are distinct by comparing observed quality across rating levels and by comparing measures of children's fall to spring gains across a range of developmental measures. There were limitations to these analyses: programs were not distributed equally across the star category levels (with most programs receiving an automatic 4-star rating) and there were small sample sizes of programs with a full-rating. In addition, the levels of observed global quality and teacher-child interaction were at moderate, not high, levels which may have restricted the ability to detect linkages between observed quality and children's developmental outcomes. With these limitations as context, the Evaluation found a slight linear trend to support the ability of the Parent Aware Rating Tool to distinguish quality at the higher end of the rating scale. However,

[4] School Readiness programs are school-based pre-Kindergarten programs administered by school districts.

there were no definitive patterns of linkages between quality rating categories and program characteristics and children's developmental gains. Looking across Parent Aware-rated programs overall, the Evaluation did find that children showed significant gains in several developmental assessments conducted in the fall and spring, and effect sizes were slightly larger on some measures for children from low-income families. This finding did not imply that Parent Aware is the cause of positive changes in children's development. It did imply that among the programs participating in Parent Aware, children were making gains in the developmental domains that are important for school readiness, language and literacy, social competence and approaches to learning. This positive trajectory could not be linked to star level or program type because small sample sizes prohibited these analyses. Finally, one-quarter of parents with children in Parent Aware-rated programs reported that they had heard of Parent Aware in the fall of 2009, a slight increase from the 20% of parents who had heard of Parent Aware in the fall of 2008. The findings were used to generate a set of recommendations to consider for statewide implementation of Parent Aware.

The present report builds upon the analyses in the three previous reports to address aspects of Parent Aware implementation as well as to continue the validation analyses that were initiated in the Year Three report. In the context of this report, validation refers to the process of demonstrating that the Parent Aware Rating Tool is functioning as intended and is distinguishing meaningful levels of quality. There are 9 sections in the report.

- Section 1 – we describe the context for Parent Aware in the final year of the pilot including an overview of legislative actions to expand Parent Aware, the continued implementation and launching of quality improvement initiatives to support Parent Aware (or to provide efforts aligned with Parent Aware in the event that the program was not continued) and participation in the federal Race to the Top Early Learning Challenge application.

- Section 2 – we synthesize data from multiple sources to describe patterns of enrollment and ratings in Parent Aware and the extent to which Parent Aware has penetrated early care and education services in the pilot areas.

- Section 3 – we analyze the risk status of the children served in Parent Aware-rated programs.

- Section 4 – we describe programs' experiences in Parent Aware.

- Section 5 – we analyze patterns of program improvement over time, describe how the various types of quality improvement supports are delivered, and examine linkages between receipt of quality improvement supports and changes in program quality.

- Section 6 – we provide information about the parents and children in Parent Aware rated programs. This section provides background on the sample as well as insights into

parents' perceptions of the early care and education they use and their knowledge of Parent Aware.

- Section 7 – we conduct "validation analyses" that examine how well the Parent Aware Rating Tool distinguishes meaningful quality levels. We analyze how scores on measures of observed global quality and teacher-child interaction vary by Parent Aware ratings and quality categories. We also examine whether the quality categories or the ratings levels relate to children's gains on a number of developmental measures that align with key domains of school readiness.

- Section 8 – we conduct analyses to identify a set of alternative rating models for Parent Aware and examine the impact of different indicators and structures on rating outcomes.

- Section 9 – we synthesize findings across the report and offer recommendations for next steps.

- Appendix A – provides details about Parent Aware including the rating process and quality standards.

- Appendices B and C – presents tables of correlations between the indicators that make up Parent Aware ratings for centers and for family child care programs.

- Appendix D – detailed statistics for the multilevel models.

- Appendix E – presents details about the structures of the alternative rating models.

- Appendix F – analyses on the relation between star rating, quality categories and parent report of children's skills.

- Appendix G – additional analyses examining the relation between observational scores and child outcomes.

- Appendix H – descriptions of the data sources used in the report.

Section 1. CONTEXT FOR PARENT AWARE

Purpose of this Section:

In preparation for the conclusion of the pilot at the end of June, 2011, many of the Parent Aware administrative and policy activities focused on strategies for ending the pilot and planning for possible expansion of Parent Aware. Other community-based, state and federal activities and initiatives also impacted the context of Parent Aware in the last year of the pilot. This section provides a brief overview of these activities and initiatives.

Key Findings:

- Uncertainty about the outcomes of the 2011 Legislative session created challenges for Parent Aware implementation and planning.
- Plans to expand Parent Aware were included in Minnesota's Race to the Top – Early Learning Challenge application.
- Quality improvement efforts were launched during the pilot to align with and support Parent Aware including the Building Quality initiative, Getting Ready, the Child Care Accreditation Project and the Minnesota Child Care Credential. Some of these efforts will continue and others will be revised or adapted for the new Parent Aware context.

Legislative and executive branch activities. In the 2011 Minnesota legislative session, the Minnesota Early Learning Foundation recommended that the Legislature support a bi-partisan bill that proposed expansion of Parent Aware and other early education reforms. In the final budget bill signed on July 20 by Governor Dayton after a three-week state government shutdown, provisions to continue a QRIS were excluded. Funds were appropriated for an early childhood scholarship ($4 million), but the use of the scholarship was not linked to quality ratings (a link that was strongly supported by the Minnesota Early Learning Foundation).

The uncertainty about the outcomes of the legislative session and the impending government shut-down were challenging for the Parent Aware Implementation and Policy teams to navigate. Prior to the conclusion of the pilot, programs and providers participating in Parent Aware, as well as those who had signed participation agreements, were told that Parent Aware would continue to operate in select areas. This decision was made in particular to support participants who had completed the Getting Ready rating preparation program supported by Greater Twin Cities United Way but who had not yet received a rating.

In early August, 2011, Governor Dayton announced the members of the Early Learning Council that will be responsible for advising the Governor and the Children's Cabinet (made up of the Commissioners from the Departments of Human Services, Education and Health) on strategies for increasing access to high quality early care and education for young children. The Governor also confirmed that Minnesota would compete for the Race to the Top Early Learning Challenge federal grant funds and that Parent Aware would continue under existing statutory

authority.[5] The Office of Early Learning in the Department of Education was launched in August and will serve as the point of contact for early learning system coordination and contact with legislators, agency staff and the public.

Through the Race to the Top application process, a targeted expansion of Parent Aware was proposed that would bring Parent Aware to all of Hennepin and Ramsey Counties, the White Earth Reservation and the three counties it covers – Becker, Clearwater and Mahnomen – as well as Itasca County.[6] In addition, through input from the cross-agency QRIS workgroup recommendations (Minnesota Department of Human Services and Minnesota Department of Education, 2011) and the Year Three Parent Aware Evaluation (Tout et al., 2010b), changes were proposed to the Parent Aware quality standards and indicators. These changes include a structural change from a point system to a "hybrid" system that incorporates "blocks" of indicators at the two lower levels of the rating tool and points that are earned at the higher levels of the tool to designate the final quality level. The intent of this structural change is to increase the rigor of the rating tool by providing required indicators for programs at lower levels that must be met before they can achieve higher rating levels. The quality indicators were also revised to include more direct indicators related to health and physical well-being and to incorporate indicators related to family partnerships into each of the quality categories (rather than having a separate Family Partnerships category). The Race to the Top application outlines plans for creating further systemic connections between Parent Aware and efforts to support the early childhood workforce and to comprehensive assessment strategies for young children. The application also details a plan for continuing the evaluation of Parent Aware to inform system implementation and improvements and to document successes and challenges in achieving desired outcomes.

Continued efforts to support quality improvement and a high quality early childhood workforce. A number of new and ongoing efforts were implemented in the final year of the pilot that were aligned and coordinated with the goals and structure of Parent Aware. American Recovery and Reinvestment Act (ARRA) funds were directed by the Department of Human Services to be used for the Building Quality initiative which provides training, coaching, consultation and grants administered through the Minnesota Child Care Resource and Referral System in partnership with the Minnesota Center for Professional Development. A Building Quality checklist is available for all programs and providers statewide to create an individualized improvement plan. Beginning in September 2010, a group of 200 providers enrolled formally in Building Quality and can access grants and consultation.

In coordination with Building Quality, the Greater Twin Cities United Way continued supports in the metropolitan area for providers who are considering enrollment in Parent Aware (through the Getting Ready project) or who are pursuing national accreditation (through the Child Care Accreditation Project). These efforts are intended to support Parent Aware enrollment and the various pathways providers may pursue toward participation. Getting Ready supports are provided primarily through options for training on Creative Curriculum and Environment Rating

[5] See press release from Governor Dayton's office dated August 10, 2011 at http://mn.gov/governor/newsroom/pressreleasedetail.jsp?id=102-15048

[6] Minnesota's Race to the Top application is available at: http://unitedfrontmn.org/minnesotaracetothetopapplication/

Scale consultation. The Greater Twin Cities United Way is also supporting the Child Care Accreditation Project to provide targeted training and consultation to facilitate attainment of accreditation.

The Minnesota Child Care Credential began courses in 2011 for both traditional coursework and e-learning courses offered through Eager to Learn (a program offering online trainings for the Minnesota Child Care Resource & Referral Network). The Credential offers 123 hours of foundational, sequenced training that is aligned with the National Child Development Associate (CDA) Credential, the Minnesota Core Competencies for Practitioners, Building Quality and Parent Aware. Over 100 participants are in the first Credential cohort (with 29 participants in the Eager to Learn cohort).

Summary of the Parent Aware Context

Parent Aware has served as a catalyst for a range of quality improvement supports and resources in Minnesota. It also provided a foundation for Minnesota's Race to the Top Early Learning Challenge application. The shape of Parent Aware will be determined in part by whether Minnesota receives Race to the Top funding. However, plans for limited expansion of Parent Aware and quality improvement supports will be implemented regardless of the Race to the Top funding.

Recommendations

- Continue using systematic strategies for tracking and recording details about the context of Parent Aware and the related quality improvement efforts that emerge in either a parallel or coordinated way to support Parent Aware. These details will be important for documenting the impact of Parent Aware over time.

Section 2. PROGRAM ENROLLMENT, PARTICIPATION, AND RATING

Purpose of this Section:

A critical question to ask at the conclusion of a voluntary QRIS pilot is the extent to which the program penetrated the early childhood market and expanded the number of rated programs in communities. This section provides an overview of key indicators that highlight patterns of enrollment and ratings from the start of Parent Aware through June, 2011.

Key Findings (as of June, 2011):

- 471 early care and education programs had received an initial rating from Parent Aware.
- One-hundred programs received one rating and chose not to pursue a second rating.
- Nearly 400 programs (388 programs) had current Parent Aware ratings.
- 63% of currently-rated programs were automatically-rated programs (accredited programs, School Readiness programs, and Head Start programs), 23% were non-accredited family child care programs and 14% were non-accredited center-based programs.
- Most programs with full ratings receive a 3- or 4-star rating; at the initial rating, 82% of programs received 3- or 4-stars, 15% had 2-stars, and 3% had 1-star.
- 28% of all eligible programs in the pilot areas were participating in Parent Aware.
- Participation of eligible programs in the pilot areas varies by program type: center-based programs (including automatically-rated accredited centers, Head Start programs and School Readiness programs) were participating at a higher rate (63%) than family child care programs (11%).

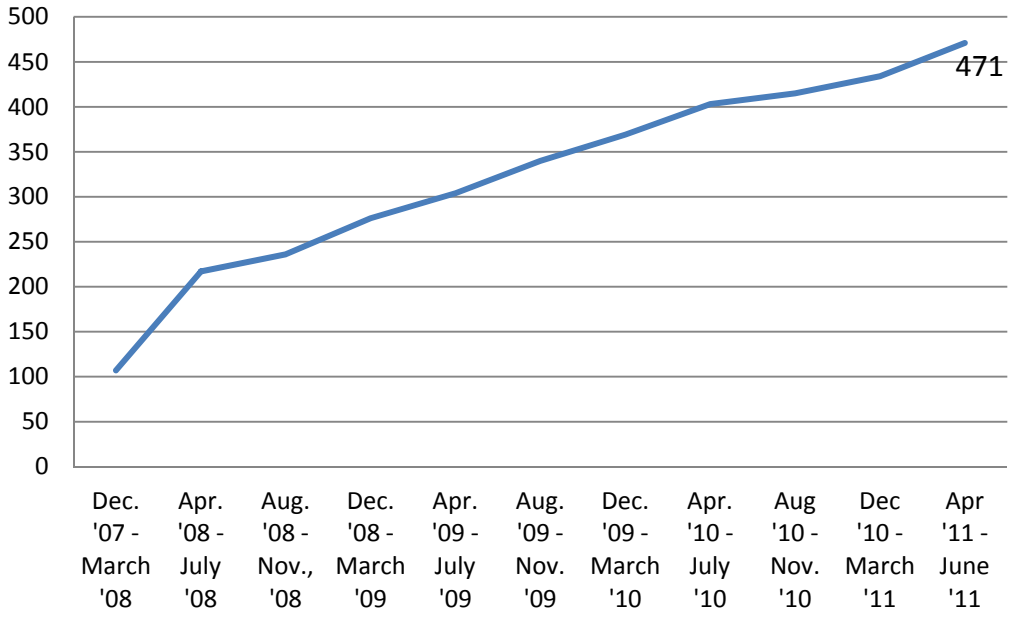
When implementing a voluntary QRIS, it is important to understand whether programs have "taken up" the invitation to enroll, and, once enrolled, to know what ratings they have achieved. There are a number of indicators that have been tracked over the pilot to address these issues. These indicators include the cumulative number of programs that have received a first or *initial* rating (in other words, the number that ever enrolled in Parent Aware), the number of programs with *current* ratings in Parent Aware (which includes those programs with an initial rating and those that have been rated more than once), and the proportion of eligible programs that are currently participating in the pilot.

Cumulative Number of Initial Ratings Given

Parent Aware provides several opportunities for programs not currently enrolled to apply and be rated throughout the year. Figures 1 and 2 show the cumulative number of initial ratings given over eleven 4-month periods, starting with December, 2007 through June, 2011. As of June, 2011, 471 programs had received an initial rating in Parent Aware (see Figure 1). Of these, 203 programs were accredited (which includes both center-based programs and family child care programs, though the vast majority are center-based), 71 were fully-rated center-based programs (child care centers and preschools), 114 were family child care programs, 23 were Head Start

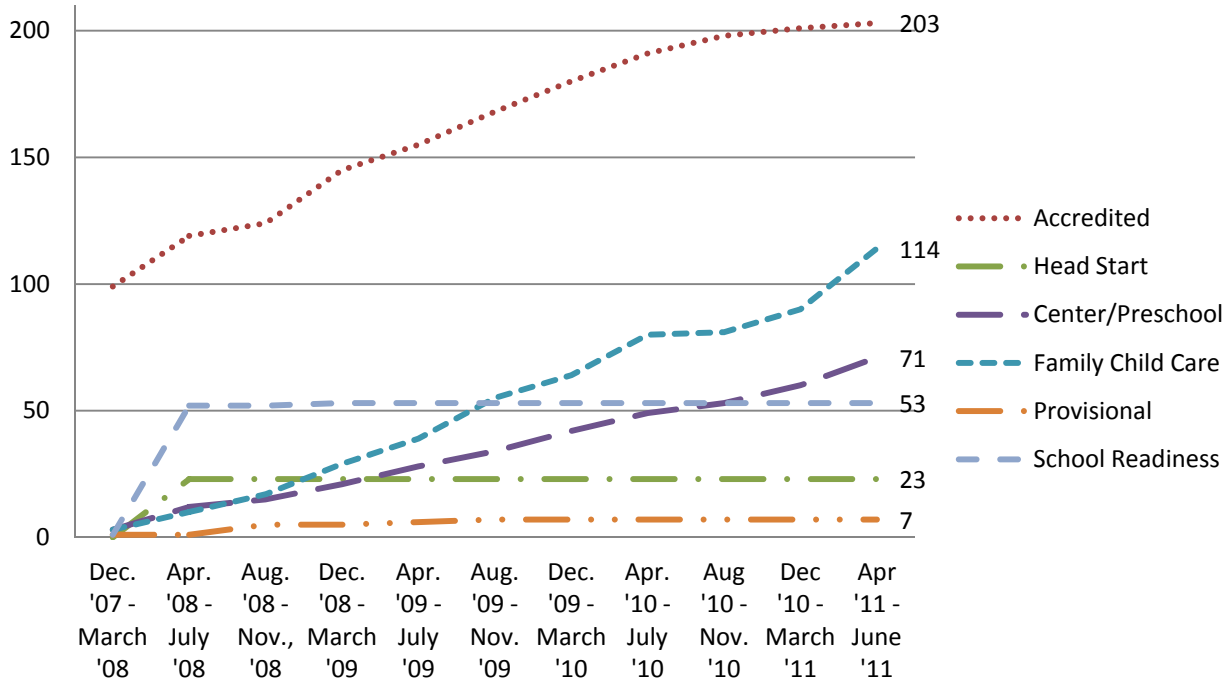
programs, 53 were School Readiness programs, and 7 were provisionally rated child care programs (see Figure 2). Accredited programs, center-based programs, and family child care programs continued to apply and receive initial ratings from Parent Aware throughout the pilot. In contrast, nearly all eligible Head Start and School Readiness programs were rated early in the pilot, so participation by these program types reached a plateau by the second cohort.

Figure 1. Cumulative number of programs with initial ratings in Parent Aware



Source: Parent Aware Rating Tool Database, Minnesota Department of Human Services as of June 30, 2011

Figure 2. Cumulative number of programs with initial ratings in Parent Aware by program type



Source: Parent Aware Rating Tool Database, Minnesota Department of Human Services as of June 30, 2011

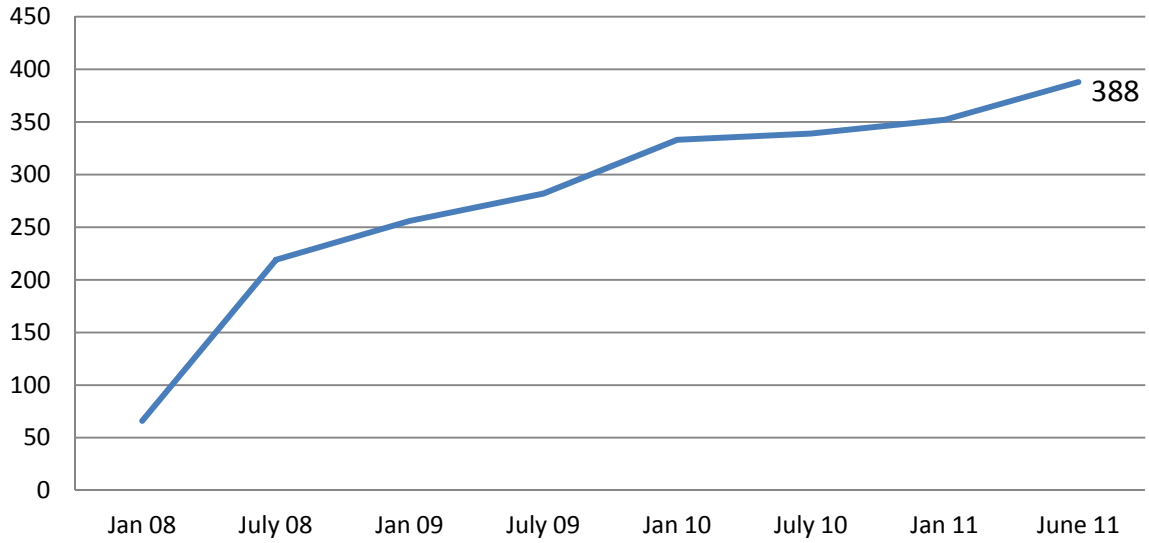
Number of Current Ratings

Examining the cumulative number of initial ratings that have been designated offers a look at the overall picture of participation in Parent Aware across the pilot. However, this measurement strategy includes programs that may no longer be participating and those with expired ratings. Indeed, 100 programs have not gone on to receive a second rating after receiving their initial rating, a 26% drop-out rate. This may be due to programs that have closed or accredited programs that let their Parent Aware rating expire.

To obtain up-to-date participation information, it is useful to examine programs with *current* ratings. As of June, 2011, there were 388 programs with current Parent Aware ratings (see Figure 3). Of these, 169 were accredited programs, 91 were family child care, 52 were School Readiness programs, 53 were center-based programs (child care centers and preschools), and 23 were Head Start programs (see Figure 4).

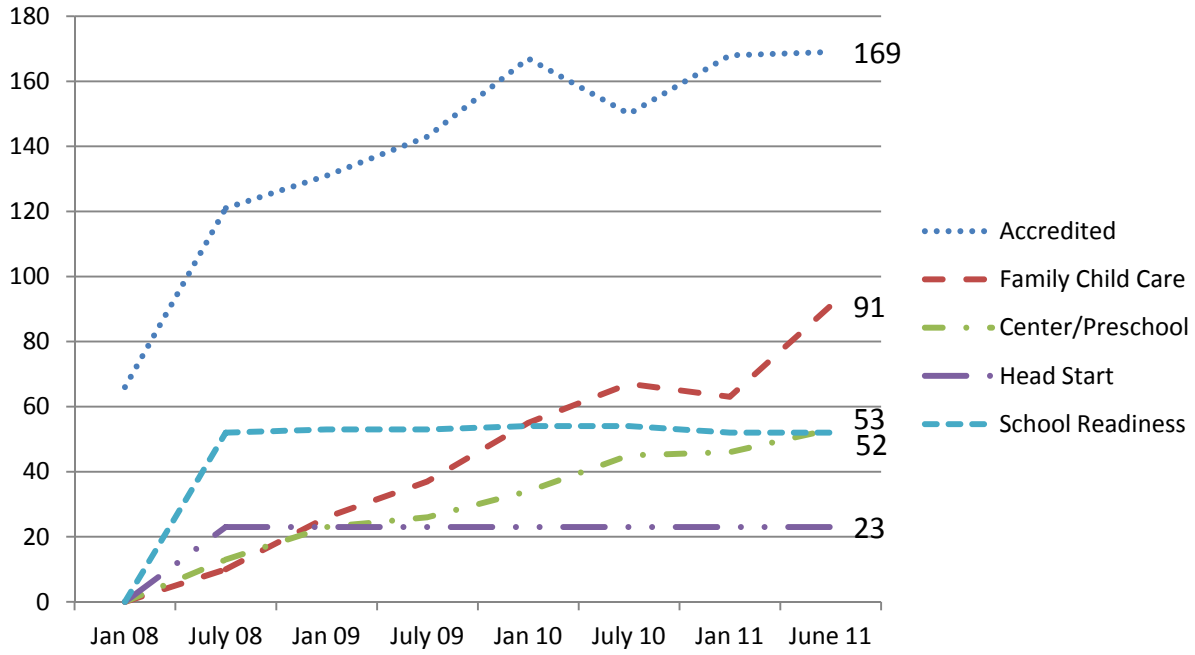
The number of programs with a current Parent Aware rating increased by 14.5% (or 49 programs) from July, 2010. Family child care programs experienced a steeper increase across the pilot than center-based programs.

Figure 3. Total number of current ratings in Parent Aware by date rating certificate was issued



Source: Parent Aware Rating Tool Database, Minnesota Department of Human Services as of June 30, 2011.

Figure 4. Total number of current ratings in Parent Aware by date certificate issued and program type



Source: Parent Aware Rating Tool Database, Minnesota Department of Human Services as of June 30, 2011

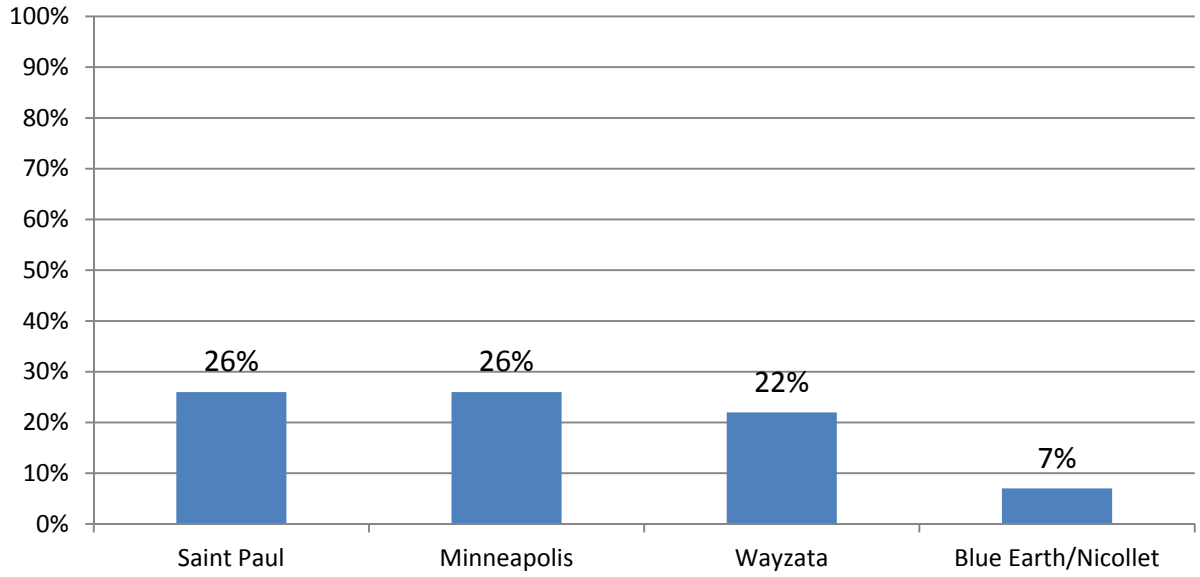
Participation in Parent Aware

Overall, 28% of all eligible programs were currently participating in Parent Aware as of June 30, 2011. Specifically, there were 388 programs with current ratings out of 1405 total

eligible programs in the pilot areas including accredited programs in the 7-county metropolitan area.[7] This figure represents approximately 17% of all eligible programs in the pilot areas as well as 83% of eligible accredited programs in the 7-county metropolitan area. Nationally, most voluntary QRIS have a participation rate of 30% or lower with some notable exceptions that have a participation rate of 50%-60% (Tout et al., 2010c).

A breakdown of Parent Aware participation in terms of percent of eligible programs in each pilot area is contained in Figure 5. The percentages of eligible programs enrolled in Parent Aware range from 7% in Blue Earth/Nicollet counties to 26% in Minneapolis and Saint Paul.[8]

Figure 5. Percent of eligible programs enrolled in Parent Aware by pilot area as of June 2011



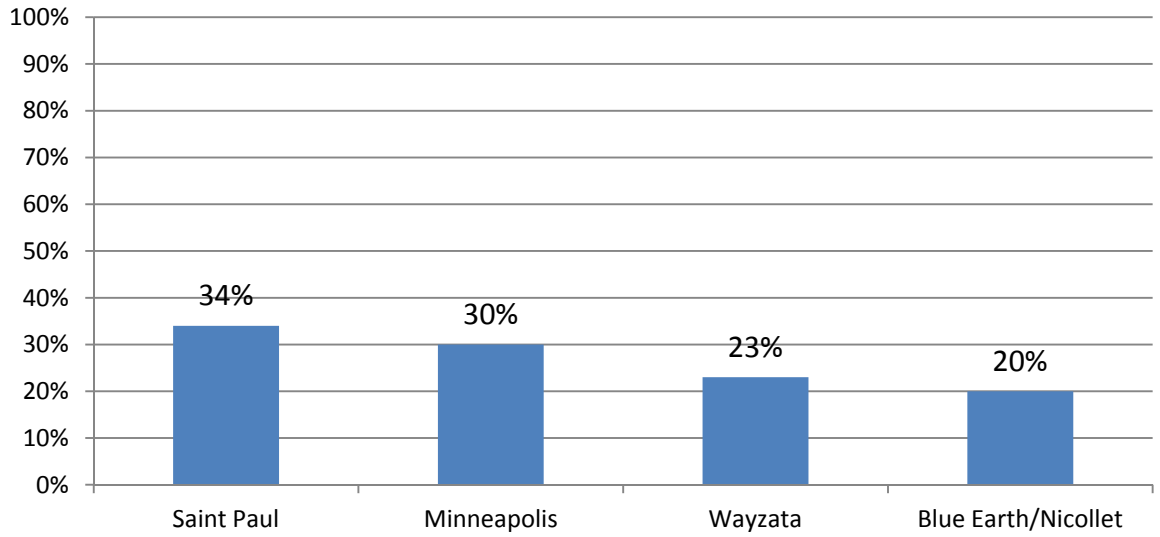
Source: Minnesota NACCRRAware, Minnesota Child Care Resource and Referral Network, June 2011 and Parent Aware Rating Tool Database June, 2011

Looking at overall participation density across center-based programs and family child care programs masks an important trend that appears when participation of eligible programs by pilot area is broken down by program type.

Figures 6 and 7 show that participation among eligible center-based programs is significantly higher than among eligible family child care programs. Across pilot areas, 63% of all eligible center-based programs (including Head Start and School Readiness) but only 11% of eligible family child care programs were participating in Parent Aware. Participation rates for center-based programs are notably higher than family child care programs in Saint Paul, Minneapolis, and Blue Earth/Nicollet pilot areas (see Figures 6 and 7).

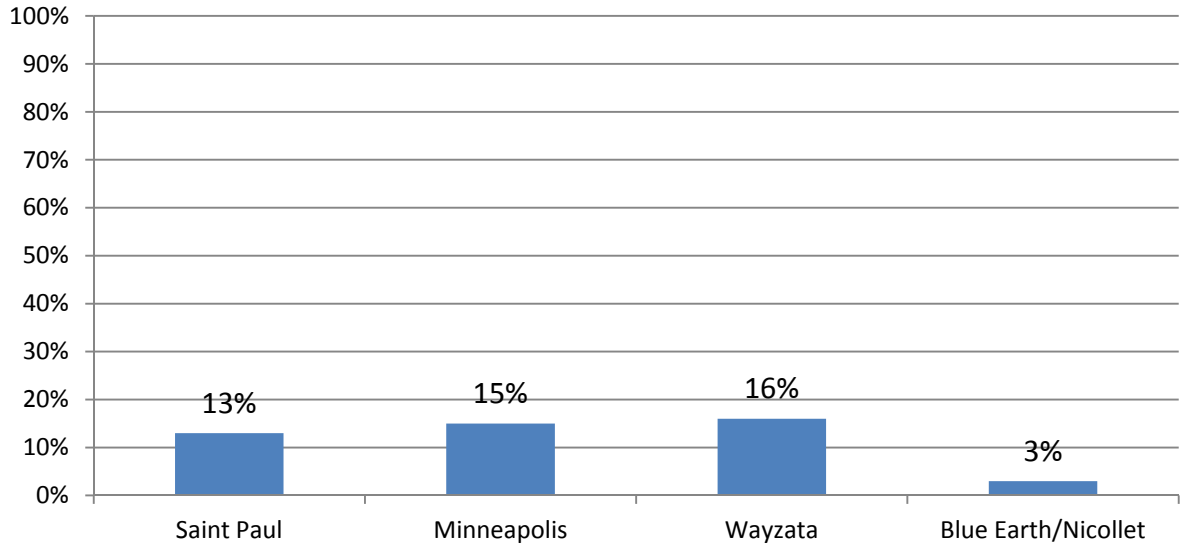
[7] The participation rate calculated in this manner has not been reported in previous Evaluation Reports. The rate is determined using data from the Parent Aware Rating Tool Database, NACCRRAware as of June 30th, 2011.
[8] This percentage does not include School Readiness programs. Nearly 100% of eligible School Readiness programs in the pilot areas enrolled in Parent Aware.

Figure 6. Percent of eligible center-based programs enrolled in Parent Aware by pilot area as of June 2011[9]



Source: Minnesota NACCRRAware, Minnesota Child Care Resource and Referral Network, June 2011 and Parent Aware Rating Tool Database June, 2011

Figure 7. Percent of eligible family child care programs enrolled in Parent Aware by pilot area as of June 2011



Source: Minnesota NACCRRAware, Minnesota Child Care Resource and Referral Network, June, 2011 and Parent Aware Rating Tool Database June, 2011

[9] This includes accredited and non-accredited child care centers.

Ratings of Programs in Parent Aware

A breakdown of currently rated programs by pilot area, program type and star level is contained in Table 1. According to the Minnesota Department of Human Services, 388 programs had a current Parent Aware rating as of June, 2011.

Table 1. Parent Aware ratings by pilot area, program type and star level as of June, 2011

Pilot Area	Program Type	4 Star-Automatic	4 Stars	3 Stars	2 Stars	1 Star	Total
7 County Metro	Head Start/Early HS	0					0
7 County Metro Accredited	Child Care Center	126					126
7 County Metro Accredited	Family Child Care	4					4
7 County Metro Accredited	Preschool Program	3					3
7 County Metro Accredited	**TOTAL**	**133**	**0**	**0**	**0**	**0**	**133**
Blue Earth/Nicollet	Head Start/Early HS	2	0	0	0	0	2
Blue Earth/Nicollet	Child Care Center	0	3	4	0	0	7
Blue Earth/Nicollet	Family Child Care	0	4	4	1	0	9
Blue Earth/Nicollet	School-based Pre-K	3	0	0	0	0	3
Blue Earth/Nicollet	**TOTAL**	**5**	**7**	**8**	**1**	**0**	**21**
Minneapolis	Head Start/Early HS	9	0	0	0	0	9
Minneapolis	Child Care Center	13	5	11	3	1	33
Minneapolis	Family Child Care	2	15	13	8	1	39
Minneapolis	Preschool Program	1	1	1	0	0	3
Minneapolis	School-based Pre-K	20	0	0	0	0	20
Minneapolis	**TOTAL**	**45**	**21**	**25**	**11**	**2**	**104**
St. Paul	Head Start/Early HS	12	0	0	0	0	12
St. Paul	Child Care Center	16	7	9	3	0	35
St. Paul	Family Child Care	0	17	17	6	2	42
St. Paul	Preschool Program	0	2	2	0	0	4
St. Paul	School-based Pre-K	28	0	0	0	0	28
St. Paul	**TOTAL**	**56**	**26**	**28**	**9**	**2**	**121**
Wayzata	Child Care Center	4	0	1	0	0	5
Wayzata	Family Child Care	0	1	1	1	0	3
Wayzata	School-based Pre-K	1	0	0	0	0	1
Wayzata	**TOTAL**	**5**	**1**	**2**	**1**	**0**	**9**
TOTAL ALL pilot areas		**244**	**55**	**63**	**22**	**4**	**388**

Source: Parent Aware Rating Tool Database, Minnesota Department of Human Services, as of June 30, 2011

Table 2 and Figure 8 depict program type and star rating. Almost two-thirds of currently rated programs (244 or 63%) completed the automatic rating process to receive a 4- star rating. Sixty-five percent (159) of these automatically-rated programs were accredited child care centers. Over one-third (144) of currently rated programs were fully-rated (see Table 2). Of

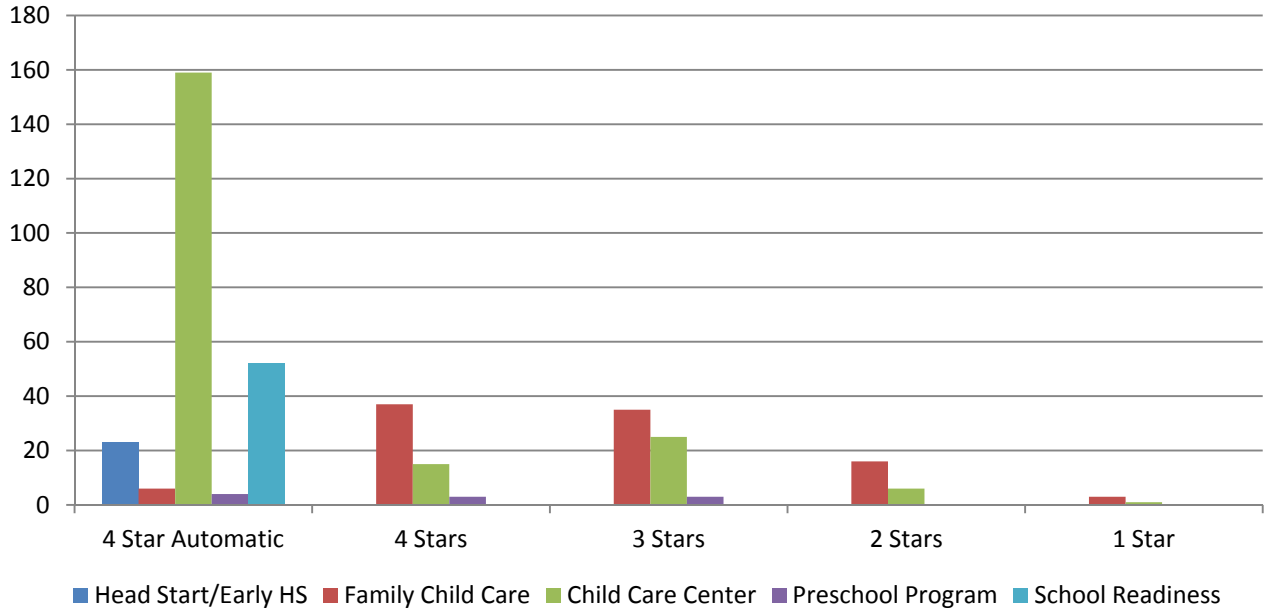
those fully-rated programs, 55 received 4 stars (15 child care centers, 37 family child care programs), 63 received 3 stars (25 child care centers, 35 family child care programs), 22 received 2 stars (6 child care centers, 16 family child care programs), and only 4 programs received 1 star (1 child care center, 3 family child care).

Table 2. Current star ratings by program type as of June, 2011

Program Type	4 Star-Automatic	4 Stars	3 Stars	2 Stars	1 Star	Total
Head Start/Early HS	23	0	0	0	0	23
Family child care	6	37	35	16	3	97
Child care centers	159	15	25	6	1	206
Preschool program	4	3	3	0	0	10
School Readiness	52	0	0	0	0	52
Total	244	55	63	22	4	388

Source: Parent Aware Rating Tool Database, Minnesota Department of Human Services as of June 30, 2011

Figure 8. Number and type of programs at each star level



Source: Parent Aware Rating Tool Database, Minnesota Department of Human Services as of June 30, 2011

Looking across currently rated programs in the Parent Aware pilot, the majority of programs have a 4-star rating that was received through the automatic rating process for accredited programs, Head Start/Early Head Start programs, or School Readiness programs. Of the 144 programs with full ratings, 38% of programs received 4 stars, 44% received 3 stars, 15% received 2 stars, and 3% received a 1-star rating. Relative to current ratings as of a similar timeframe last July, 2010, there is a shift toward more programs at the higher star levels.

Summary of Participation and Ratings

Participation in Parent Aware is growing steadily. As of June, 2011, 471 early care and education programs had received initial ratings from Parent Aware. Sixty-seven new programs have received initial ratings in the nine months since the Year 3 Parent Aware Evaluation Report. The number of currently rated programs rose to 388 in June, 2011 from 339 in July, 2010. One-hundred programs have dropped out of Parent Aware over the pilot.

Overall, 28% of all eligible programs in the pilot areas had taken-up the invitation to enroll in Parent Aware as of June 30, 2011. In terms of eligible programs within the pilot areas of Saint Paul, Minneapolis, Wayzata School District, and Blue Earth and Nicollet Counties (not including the additional accredited programs in the 7-county metro area), participation has risen 3% in the last nine months (from 14% in September, 2010 to 17% in June, 2011). Center-based programs participated in Parent Aware at a higher rate than family child care programs (63% and 11% respectively). Additionally, a high proportion of automatically-rated 4-star programs are enrolled in Parent Aware, with 83% of eligible accredited and Head Start programs participating as of June, 2011. Nearly 100% of School Readiness programs have also enrolled in Parent Aware.

The majority of currently rated programs in Parent Aware have received an automatic 4 star rating due to their accreditation status, or because they are Head Start/Early Head Start or School Readiness programs. Of the 37% fully-rated programs, most (82%) received 3 or 4 stars. There were fewer programs receiving 2-stars (15%) and 1-star (3%) than in previous years of the pilot. Participation in Parent Aware is clearly facilitated by the automatic rating process (with a smaller proportion of programs participating in the full rating process). Programs are more likely to be rated at higher quality levels (3- or 4-star ratings) than lower quality levels.

Recommendations

- The distribution of programs in Parent Aware is heavily weighted toward the upper end of the rating scale. Consider strategies to recruit programs at lower quality levels to increase the diversity of programs included in Parent Aware.

- The density of program participation (calculated as the percentage of eligible programs that have enrolled in Parent Aware) is in the middle range of participation rates seen nationwide in voluntary QRIS. Develop incentives and supports to encourage greater participation across center-based programs and family child care programs.

Section 3. RISK STATUS OF CHILDREN SERVED IN PARENT AWARE-RATED PROGRAMS

Purpose of this Section:

A goal of Parent Aware is to recruit a wide array of programs that are serving children who may be at risk for school success because of their family income level or because of their status as English Language Learners. This section provides an overview of the children being served in Parent Aware-rated programs. We include information about the overall number and characteristics of children served.

Key Findings:

- As of June, 2011, Parent Aware-rated programs are serving approximately 23,900 children.
- Most of those children are being served in accredited child care centers, School Readiness programs, and Head Start programs.
- The majority of children served in Parent Aware-rated programs are preschoolers (62%).
- Approximately one-third of all children served in Parent Aware-rated programs (including accredited center-based and family child care programs and all fully rated programs) are receiving subsidies through the Child Care Assistance Program (CCAP). (Data were not available for children in Head Start and School Readiness programs, so subsidy use is underestimated).
- Approximately one-sixth of children served in Parent Aware-rated programs are English Language Learners. (Data were not available for children in Head Start and School Readiness programs, so English Language Learner status is underestimated).

Number of Children Served by Parent Aware-rated Programs

As of June, 2011, Parent Aware-rated programs are serving approximately 23,900 children. Most of those children are being served in accredited child care centers, School Readiness programs, and Head Start programs which can enter Parent Aware with an automatic 4-star rating. Although there are more fully-rated family child care programs (91) than fully-rated center-based programs (including child care centers and preschools) (53), more children are served in fully-rated child care centers because these programs have a larger average enrollment. Table 3 shows the average and total number of children enrolled in each type of program participating in Parent Aware.

Table 3. Children enrolled in currently-rated Parent Aware programs

Provider Type	Average number of children enrolled at each site*	Number of programs in Parent Aware	Estimate of total number of children enrolled*
Fully-rated family child care	8.8*	91	792
Accredited family child care	8	6	48
Fully-rated child care centers and preschools	62.1*	53	3,291
Accredited child care centers and preschools	82.7*	163	13,480
Head Start and Early Head Start programs	168.4	23	3,874
School Readiness programs	46*	52	2,392

* Enrollment numbers were available for 84 of the 91 fully-rated family child care programs, 51 of the 53 fully-rated centers and preschools, 161 of the 163 accredited centers and preschools, and 51 of the 52 School Readiness programs. These averages are based on the available data as of October 14, 2011.
Source: Minnesota NACCRRAware (July 2011), Community Action Partnership of Ramsey and Washington Counties (personal communication, 10/12/11), and the Minnesota Department of Education (personal communication, 10/11/2011)

Table 4 contains details about the age distribution of children served in programs participating in Parent Aware. As can be seen in Table 4, School Readiness programs serve only preschoolers and Head Start programs serve primarily preschoolers (in their center-based programs). Family child care programs and center-based programs are more likely to serve infants and toddlers, but still serve more preschoolers than any other age group.

Table 4. Estimated age distributions of children in currently-rated Parent Aware programs

Provider Type	Percent of children who are infants	Percent of children who are toddlers	Percent of children who are preschoolers	Percent of children who are school-age
Fully-rated family child care*	14%	20%	53%	13%
Accredited family child care	8%	17%	49%	26%
Fully-rated child care centers and preschools*	12%	21%	51%	16%
Accredited child care centers and preschools*	13%	17%	54%	16%
Head Start and Early Head Start programs	0%	3%	97%	0%
School Readiness programs*	0%	0%	100%	0%
Overall*	11%	15%	62%	12%

*Enrollment numbers were available for 84 of the 91 fully-rated FCC, 51 of the 53 fully-rated centers and preschools, 161 of the 163 accredited centers and preschools, and 51 of the 52 School Readiness programs. Averages by provider type are based on the available data. These averages are then weighted according to the total number of programs of each type to produce an overall percentage.
Source: Minnesota NACCRRAware (July 2011), Community Action Partnership of Ramsey and Washington Counties (personal communication, 10/12/11), and the Minnesota Department of Education (personal communication, 10/11/2011)

Table 5 contains an examination by star level of the number of children enrolled in programs participating in Parent Aware. This table clearly shows that the bulk of children served by Parent Aware-rated programs are enrolled in programs with automatic 4-star ratings.

Table 5. Enrollment by star level

Star Level	Average number of children enrolled at each site	Number of programs in Parent Aware	Estimate of total number of children served
1 star	15.3	4	61
2 stars	23.3	22	513
3 stars	35.5	63	2,237
4 stars, fully-rated	23.7	55	1,304
4 stars, automatically-rated	81.1	244	19,788

*Averages based on 3 1-star programs, 21 two-star programs, 59 three-star programs, 51 fully-rated four-star programs, and 241 automatically-rated four-star programs.
Source: Minnesota NACCRRAware (July 2011), Community Action Partnership of Ramsey and Washington Counties (personal communication, 10/12/11), and the Minnesota Department of Education (personal communication, 10/11/2011)

Children Receiving Subsidies through the Child Care Assistance Program

Of the 291 currently-rated family child care programs and center-based programs for which NACCRRAware data were available, 246 reported that they are currently caring for children whose tuition is subsidized by the Child Care Assistance Program (CCAP).[10] This represents 74% of family child care programs and 89% of center-based programs. A small portion of programs (1% of family child care programs and 2% of center-based programs) report that they are unwilling to serve children who receive CCAP. These numbers align with survey data collected by the Parent Aware Evaluation showing that 67% of family child care programs are caring for at least one child who is receiving CCAP (N=45). Among directors of center-based programs who responded to the survey, 81% reported that they are currently serving children receiving CCAP benefits (N=70).

Using data from the Parent Aware Evaluation survey, it is possible to create an estimate of the number of children in Parent Aware-rated programs that are receiving CCAP. As can be seen in Table 6, it is estimated that 34% of all children served in currently-rated programs (not including Head Start/Early Head Start or School Readiness programs) are receiving CCAP. From this figure, it can be extrapolated that approximately 4,864 children in currently-rated Parent Aware programs (not including Head Start or School Readiness programs) are receiving subsidies through CCAP.[11]

Table 6. Parent Aware programs serving children who receive subsidies through the Child Care Assistance Program (CCAP)

Type of care	% of infants receiving CCAP	% of toddlers receiving CCAP	% of preschoolers receiving CCAP	% of school-age children receiving CCAP	Estimated total percentage of children receiving CCAP
Family child care (N=45 programs)	18%	29%	31%	32%	30%
Child care centers and preschools (N=70 programs)	43%	45%	36%	47%	36%
Estimated Total *	35%	40%	34%	42%	34%

*Estimates are based on applying the average percentages found in the survey data to the full number of programs currently rated by Parent Aware (97 Family child care programs and 216 center-based programs).
Source: 2011 Parent Aware Evaluation Survey data from 45 family child care provider and 70 directors of center-based programs.

[10] Based on data reported in Minnesota NAACCRRAware, Minnesota Child Care Resource and Referral Network, accessed in September 2011.

[11] This percentage is much lower than those reported in the MELF Baseline Study which found nearly 60% of children enrolled in center-based programs and 46% enrolled in family child care programs in the urban pilot areas received CCAP (Chase & Moore, 2008). These discrepancies are likely due to the sampling strategy for the MELF Baseline Study which did not include the 7-county metropolitan area (and approximately 1/3rd of programs in Parent Aware are accredited center-based programs from the 7-county metropolitan area).

Children who are English Language Learners

Survey data from the Parent Aware Evaluation reveals that 18% of family child care providers and 70% of directors of center-based programs report that they are serving at least one child who is an English language learner. Using these data, estimates of the total numbers of English language learners in Parent Aware programs can be created. As can be seen in Table 7, it is estimated that 16% of children who are in Parent Aware-rated programs (not including Head Starts and School Readiness programs) are English Language Learners. This translates to an estimate that approximately 2,889 English Language Learners are served in currently-rated programs.[12]

Table 7. Parent Aware programs serving children who are English language learners

Type of care	% of infants who are ELL	% of toddlers who are ELL	% of preschoolers who are ELL	% of school-age children who are ELL	Estimated total percentage of children who are ELL
Family child care (N=45 programs)	2%	5%	10%	9%	8%
Child care centers and preschools (N=70 programs)	4%	6%	26%	5%	20%
Estimated Total*	4%	6%	21%	6%	16%

*Estimates are based on applying the average percentages found in the survey data to the full number of programs currently rated by Parent Aware (97 Family child care programs and 216 center-based programs).
Source: 2011 Parent Aware Evaluation Survey data from 45 family child care provider and 70 directors of center-based programs.

Summary of Children Served in Parent Aware-Rated Programs

Nearly 24,000 children are currently being served in Parent Aware-rated programs. Most of these children are in programs with a 4-star rating. Just under two-thirds of the children (62%) are preschoolers. Approximately one-third of all children served in currently-rated programs (not including Head Start/Early Head Start or School Readiness programs) are receiving subsidies through the Child Care Assistance Program (CCAP). Approximately one-sixth of children served in Parent Aware-rated programs (not including Head Start and School Readiness programs) are English Language Learners.

[12] This is a lower percentage than the percentage of households with a primary language other than English in the MELF pilot areas as estimated by the MELF Baseline study (Chase & Moore, 2008). The Baseline Study reported that about half of the households in the Minneapolis and St. Paul pilot and comparison areas spoke a primary language other than English (including Spanish, Somali and Hmong). The percentage was much lower (approximately 10%) in Blue Earth and Nicollet counties and the southern Minnesota comparison areas.

Recommendations

- Continue to diversify the programs that are enrolled in Parent Aware. Targeted support strategies such as those that were evaluated in the Getting Ready program and that were aimed at recruiting family child care providers and programs serving children who are English Language Learners can be successful in facilitating recruitment of programs serving a higher percentage of children with particular risk factors.

- Automate the process for gathering data on the characteristics of children served in Parent Aware-rated programs. These statistics are included in performance measures proposed for Race to the Top and in new reporting requirements for the federal Child Care and Development Fund program and will need to be tracked on a regular basis.

Section 4. PROGRAMS' EXPERIENCES IN PARENT AWARE

Purpose of this Section:

Programs' experiences in Parent Aware and their perceptions of how beneficial and supportive the program is to their work are important potential predictors of sustained enrollment in the QRIS. This section analyzes programs' responses to survey questions asking them to rate various aspects of their experience and to provide open-ended responses to questions about their perceptions of the program.

Key Findings:

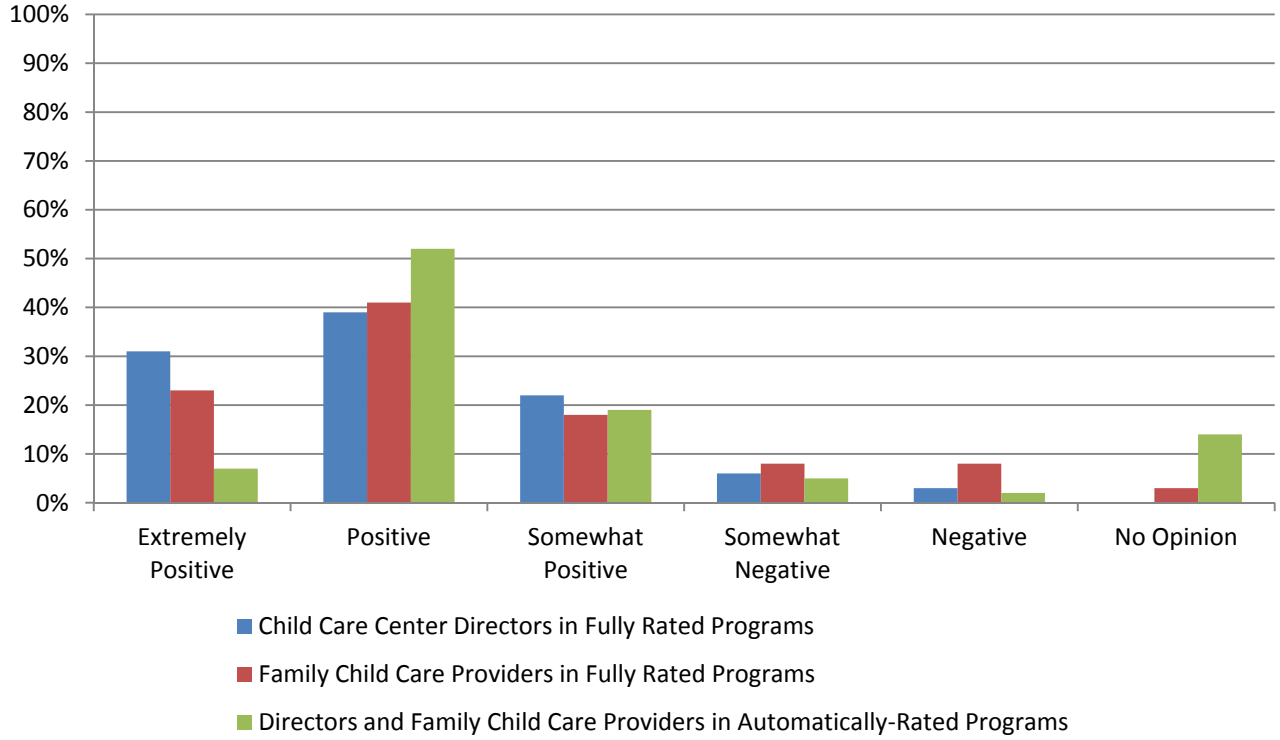
- The majority of program participants report that they have extremely positive or positive impressions of Parent Aware.
- Over time, program participants report that they have developed a positive perception of how Parent Aware is helping them improve their quality.
- Fully-rated programs are more likely than automatically-rated programs to agree that their program is of higher quality after joining Parent Aware and that Parent Aware has been beneficial to their program.
- Suggestions from program participants for improving Parent Aware center around the observational component of the rating process. Comments focused on their perception that the observation is not objective and the tools may not be appropriately tailored to programs of different types (for example, Montessori programs and family child care programs).
- To date, program participants indicate that they agree somewhat (but not strongly) that Parent Aware has made an impact on their marketing and relationships with families.

Overall Impressions of Parent Aware

Family child care providers, child care center directors, Head Start center managers, and School Readiness directors were asked about their overall impression of Parent Aware on a 6-point scale. The majority of programs reported that they had "extremely positive" or "positive" impressions. Fully-rated programs were more likely than automatically-rated programs to report having "negative" or "somewhat negative" impressions of Parent Aware, though only a small portion of the programs of any type reported a negative impression. Of the fully-rated programs, fully-rated family child care providers were slightly more likely than fully-rated center directors to report "somewhat negative" or "negative" impressions of Parent Aware (see Figure 9).

In the next sections, we use ratings and open-ended items from the Parent Aware Evaluation survey of program participants to describe providers' perceptions and experiences in Parent Aware. We use quotes from the survey to illustrate common themes and perceptions using the providers' own words.

Figure 9. Overall impression of Parent Aware reported by participants



Source: 2011 Parent Aware Evaluation Survey. Responses from 36 fully-rated child care center directors, 39 fully-rated family child care providers, and 42 directors and providers of automatically-rated programs, Head Start programs, and School Readiness programs.

Providers' perceptions of Parent Aware. Directors of fully-rated centers who reported feeling "extremely positive" or "positive" about their impressions of Parent Aware commented that the support they received from Parent Aware was helpful and that Parent Aware is a useful tool to improve early childhood program quality.

- "I think it's a great tool. It helps you look at what you're doing well as well as what you can improve. Anything that can help improve child care centers is great and long overdue."
- "Loved it! It made me understand how to do my job better and made my center improve for the better for not only the children, but staff as well."
- "It was tough work for my staff to adjust their methods, philosophies, approaches, and redesigning their classrooms. It was tough to meet the needs of so many "at risk children" and families. But I am grateful for my staff who embraced it whole-heartedly. They have made our program one that is truly quality for ALL children and families. I am grateful for our Parent Aware Liaisons. They are true champions and early childhood heroes. I am proud of myself for seeing the need for change and leading to the path of success for all!"
- "The support you receive doing the program is positive and helpful. It is also constantly making changes to be relevant and intentional to helping the centers with the best quality of care."

A couple directors, despite rating Parent Aware as "extremely positive" or "positive", were also critical about components of its implementation.

- "I do not believe we received a full explanation of how to proceed. We attended the orientation session and were pretty much left on our own with how to put the notebook together. I felt at times that there was no acknowledgement of the good things we were doing and to just do them the *'Parent Aware'* way."
- "Parent Aware is an excellent idea; however, it lacks strong leadership and direction. No one seems to understand its long-term vision or stability. Did Parent Aware become the state's QRS program? Does DHS or MELF run the show? Will it be funded or is it at the mercy of the legislature? There seems to be no one identifiable at the helm. If you are asking/requiring centers to participate, we need confidence in PA's plan for the future."

Fully-rated directors who reported feeling "somewhat positive," "somewhat negative," and "negative" about Parent Aware had nuanced and mixed comments to share.

- "I feel centers could be supported and parents receive information on quality without all of the hoop jumping."
- "Too much paperwork took time away. The PA professionals did not know much at all about Montessori education and I had to go to excess effort to explain it in more paperwork. When visited by PA specialist, the children were uncomfortable because of the stranger and my limited permission to explain her presence."
- "Halfway through our "Getting Ready" we hired four new AMI Montessori-trained teachers who built complete, beautiful Montessori environments. We continued 2 "traditional" preschools. The traditional preschools had no curriculum or expectations for their classroom environments. So, the Parent Aware process forced us to get added training on curriculum and assessments and look more closely at those environments. It was a good opportunity to cull out junk. As for the Montessori, I don't think the observers understood the nature of some of the materials and when invited by the teacher for a short tour, declined. Many of the materials are in boxes and packets and may not be readily observed. The Montessori teachers are so well trained in a complete curriculum so Parent Aware was not meaningful for them. The Creative Curriculum our traditional teachers trained in is seriously lacking."
- "There were too many times when different parts didn't line up - not having enough training opportunities that were required at times that worked. Having to spend our money before our ERS Consultant spent time with us. Having to correct things with career lattice when binder was due, etc. I presume these are things that would be fixed if Parent Aware went beyond a pilot. I also felt that while some parts were very in-depth that the overall review did not come close to what Accreditation did for us in Q.I. [quality improvement]. Therefore, I would not want Parent Aware over accreditation."

Fully-rated family child care providers who rated their impression of Parent Aware as "extremely positive" or "positive" commented about how the Provider Resource Specialists have taught them techniques to improve the quality of care they provide.

- "It's helping me learn a lot to help the children. I know what to do to help the children. I've changed the way I teach my children, giving them more room to play and learn.

Washing hands all the time… when the kids come into the house they have to wash their hands. I don't have that many kids get sick now."

- "Parent Aware Specialist help me prepare and gave me resources I needed. They respond every time when I needed help. Thanks to [name of Provider Resource Specialist]! She also helped me arrange and apply for funding for some materials and equipment to help improve my rating in my program."
- "I have learned a lot about child care from [name of Provider Resource Specialist], reading, and talking with other providers in my local child care group. I have not interviewed families that learned about my child care services through Parent Aware. However, I am grateful for the assistance."

Fully-rated family child care providers who rated their overall impression of Parent Aware as "somewhat positive," "somewhat negative," "negative," or "no opinion" reported feeling frustrated and rushed and that Parent Aware is geared more for center-based programs.

- "I think a program like Parent Aware should have different levels and they do not emphasize the positive then give you resource to improve. I felt belittled and a failure."
- "I feel I was rushed through the program. Didn't get a mentor as other providers had."
- "If given a chance to do it again, I wouldn't. It was a frustrating process with a lot of vague info. I felt it was geared for centers and the changes I needed to make were not realistic for my family home."
- "Overall, the program has a lot of good things to offer and help us be better providers. My negative [comment] is that the program is set up for center care rather than home-based care, which makes it hard to meet some rules with one person and small work space."

Automatically-rated providers who rated their impression of Parent Aware as "extremely positive" or "positive" had less to say about Parent Aware in general. This is likely because their rating process is expedited relative to providers who complete the full rating process. However, a couple directors acknowledged that Parent Aware can be used as a marketing tool and support the premise of improving the quality of early education.

- "Great support and marketing for the center."
- "We are accredited so we don't have much to do with it, but I think it is a good program for those who want to increase their quality."

Automatically-rated providers who reported feeling "somewhat positive," "somewhat negative," or "negative" about Parent Aware commented that more marketing needs to be done so parents and the early childhood community are more informed about it.

- "I understand what Parent Aware is, but I feel like parents are not informed about the program. It does not directly affect my center nor my parents…. I agree that centers that are accredited should automatically receive the highest rating without direct observations/evaluations."
- "I'm aware that it exists and I know it is a tool parents can use to find high quality care, but I never hear other EC professionals talk about it."

Changing Perceptions of Parent Aware

Survey respondents were asked how their perceptions of Parent Aware have changed since they first joined. The most frequent comment from fully-rated providers referenced the work they put into Parent Aware and their awareness over time that Parent Aware has been a helpful tool to better understand what quality child care is. More providers and directors from fully-rated programs (22%) made positive comments about the helpfulness of Parent Aware as a tool, compared to automatically-rated programs (9%).

Center directors from fully-rated programs commented:

- "I think it's a great program for childhood educators to make sure they are going above and beyond to get children ready for school."
- "I believe in improving early childhood care and this is a way to accomplish that. I was somewhat naive going in."
- "I have become an advocate for Early Childhood and the standards that every parent deserves for their child."
- "I did not realize the volume of work it would take to get us where we are today. Parent Aware is a total quality awareness program. Our center has built on our strengths, become aware of our needs, set goals for where we want to improve and continue to evaluate where we are going to continue to grow."

Family child care providers from fully-rated programs commented:

- "Going through the process I've noticed the areas that the program focuses on and [I] have paid more attention to those areas in my community and I understand the importance of Parent Aware. I now feel that it really allows providers to reach their highest potential if they are willing."
- "It was a lot more work than I had thought it would be. It sure made me look at areas I thought I was good in and improve."

Fourteen percent of fully-rated programs commented that their perception of Parent Aware had improved or changed over time since they first joined.

For example, center directors from fully-rated programs commented:

- "It was not exactly as I expected but as I learned more about it and participated. I thought it was good."
- "I was surprised by the amount of support we have received from the program. We joined the pilot program to get ready for accreditation and to see where we needed to improve the most."
- "At first I was a little overwhelmed with it. I had missed an orientation at the beginning. The first few months were pretty rocky for me, but then it was good."
- "I feel it is a lot less threatening."
- "We received a lot more help with the process than I first thought."

Family child care providers from fully-rated programs also commented that their perception of Parent Aware had improved:

- "I thought Parent Aware was going to be hard and frustrating to do, but the staff there are so helpful and I am proud of myself to join Parent Aware. I feel successful in the program. I was given the best support from Parent Aware."
- "I was not aware it was available until it was offered to me. I have learned a lot and look forward to learning more."
- "I think Parent Aware should be a must for all providers. However I can see how some could be intimidated like I was when I first joined. It is an easy program and very informative."
- "It is change a lot on my center because my kids know, learn, and parents are even happy too."
- "Made more confident in my program being a success. Help me reach my professional status."

Fully-rated programs were more likely to have mixed reactions or negative comments (18%) than automatically-rated programs (9%) about how their perceptions of Parent Aware have changed over time.

For example, fully-rated center directors noted:

- "I feel like Parent Aware is less organized than I initially thought. I realize it is a pilot project, but there is some confusion regarding its funding (i.e. whether scholarships will be available to families, etc.) and its direction. I think it's a great step in the right direction and I hope it becomes a statewide mandatory program."
- "It is a great deal of busy work."
- "Our parents are not concerned about Parent Aware ratings."

Fully-rated family child care providers commented:

- "My perception have not change at all, but I did feel participating in Parent Aware would help increase children in my child care and it did not."
- "Parent Aware made me feel as a provider that my program was really only worth a '2' when I know it's worth so much more than a small number."
- "I was excited to improve myself and my program and to have assistants and good resources to help me do so. At the end, I was very stressed and discouraged to learn some of the guidelines/rules were unrealistic for one provider to accomplish."
- "I thought it was a waste of my time. I have my CDA so I think the classes and curriculum should convert to college hours or CEU's."
- "Honestly it has not, everything is the same for me. It has not opened doors. When I get a child it is not because of the 4 stars. In the 3 years, I have only had 2 brothers from Parent Aware. Because I really worked hard to continue to have my 4 star I was hoping that more kids would have come to my program."

In addition to providing open-ended responses, providers who responded to the Parent Aware Evaluation survey were asked to rate various aspects of Parent Aware and report how strongly they agreed or disagreed with statements about Parent Aware. Providers agreed most strongly with the statement that the Parent Aware rating accurately reflects their programs' quality (this average includes responses from both automatically-rated and fully-rated programs combined; see Table 8). Fully-rated programs are more likely to agree that their program is of higher quality after joining Parent Aware ($p < .001$) and that Parent Aware has been beneficial ($p < .001$) than automatically rated programs. Overall, the majority of providers report strong or somewhat positive perceptions of Parent Aware.

Table 8. Perceptions of Parent Aware

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
I believe my program is of higher quality because I joined Parent Aware	9%	4%	15%	35%	36%
Parent Aware has been beneficial to my program	3%	4%	17%	35%	42%
My experience with Parent Aware has been what I expected.	6%	15%	19%	36%	24%
The rating I received accurately reflects my program's quality.	7%	13%	8%	14%	58%
The rating process is fair.	13%	11%	15%	33%	29%

Source: 2011 Parent Aware Evaluation Survey. Responses from 36 fully-rated child care center directors, 39 fully-rated family child care providers, and 42 directors and providers of automatically-rated programs, Head Start programs, and School Readiness programs.

Programs' Recommendations for Improvements to Parent Aware

Survey respondents were asked what improvements they would like to see for Parent Aware. There were a variety of recommendations from programs. The most consistent answer from directors of fully-rated programs and fully-rated family child care providers was to improve the ERS and CLASS observations. Comments from directors and family child care providers in fully-rated programs focused on their perception that the observation scoring process is subjective.

- "I feel like when they're doing the observation, if they don't see us doing it, we get marked off. Maybe do a couple observations."
- "Observations and rating process is terrible. Inaccurate negative comments on report and by then I was too exhausted to care to dispute them. My Provider Resource Specialist was not helpful. I did much more work than I needed to due to inaccurate information from her."
- "Change the observation. Make it like the PEK program with more observations with suggestions of how to improve and help doing it and come back with discussions about MY environment and etc. and see the improvements throughout the process. Each different observer seemed to have different pet-peeves. Looking at the observation, I think I would have liked an immediate comeback because they all missed certain things that they wrote about."

- "ERS observers have to be child care providers who work with children in real settings."
- "Fix the FCCERS!"
- "I think I should have been better prepared before the assessment. I also think the person who rated me should be been better qualified."
- "That we are child care providers and not centers, the rating assessments I feel were targeted for centers. That should change on how in home should be rated different."

Some fully-rated family child care providers (17% of those completing the survey) expressed an interest in receiving stronger mentoring and more training.

- "More one-on-one with specialist for those that need it."
- "Less experimentation more hands on coaching."
- "More follow up with a mentor, etc."
- "Consistency with consultants, specialist to providers and availability. More hands-on workshops - especially for preparing the documentation binder."

A small portion of fully-rated family child care providers (15%) also thought that family child care programs should have different standards than center-based programs.

- "Make family child care appropriate (less center focused)."
- "Separate guidelines for center and home-base child care."
- "Child care does not have the same standards for centers as home day care."
- "Maybe, more training on curriculum. Although I heard it's been changed/raised. Also, maybe a little different guidelines for home daycares."
- "Start from scratch, separate centers standards from home care. Scrap the "book/binder". Let some family child care providers put together a new program."
- "Gear it for home day care. Do providers really change what they do for "the day" of assessment or forever. I think it's the first. I was frustrated to find out other providers had helpers come in just for their assessment. Sure the extra hands helped their rating that day."

There were numerous other recommendations for improvements to Parent Aware that were noted by one or two fully-rated respondents. They included comments about eliminating the automatic rating; inclusion of other curriculum and assessment tools; allowing 4-star programs to receive quality improvement dollars; a need for better marketing to families; a need for training before the rating process; a request to improve the consultants; a request to improve supports for family child care providers who are English Language Learners (ELL); an idea to increase the length of the rating; an interest in making the rating mandatory; and a need to consider the context of a program, particularly if the early care and education program is located at an elementary school.

Automatically-rated programs reported that there needs to be better marketing and advertising of Parent Aware (n=6); more training should be offered (n=4); Parent Aware should work more closely with families (n=3); and it needs to expand to more programs both licensed and family, friend, and neighbor providers (i.e. non-licensed providers) (n=2).

All providers were asked about their agreement with statements about the marketing impact Parent Aware has made on their families and on their program (see Table 9). Automatically-rated programs are more likely to agree that joining Parent Aware was done primarily for marketing purposes ($p < .05$) compared to other programs. Family child care providers and fully-rated programs are significantly more likely to agree that Parent Aware has been beneficial to their families ($p < .05$) than automatically-rated programs. Family child care providers and fully-rated programs also are more likely to agree that they tell families about Parent Aware ($p < .05$). Overall, participating programs only somewhat agreed that Parent Aware has made an impact on their marketing or relationships with families.

Table 9. Perceptions of Parent Aware marketing and impact on relationships with families

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
I would recommend that other family child care providers / programs join Parent Aware.	6%	5%	23%	26%	40%
I joined Parent Aware primarily as a marketing tool for my program.	10%	9%	27%	37%	17%
Families are more likely to choose my program because I joined Parent Aware.	14%	19%	27%	28%	12%
Parent Aware has been beneficial to the families I serve.	7%	9%	21%	28%	35%
I tell families in my program about Parent Aware.	5%	7%	17%	23%	47%

Source: 2011 Parent Aware Evaluation Survey. Responses from 36 fully-rated child care center directors, 39 fully-rated family child care providers, and 42 directors and providers of automatically-rated programs, Head Start programs, and School Readiness programs.

Summary of Programs' Experiences in Parent Aware

The majority of programs reported "extremely positive" or "positive" impressions of Parent Aware. The small percentage of providers responding with "negative" or "somewhat negative" impressions of Parent Aware tended to be in fully-rated programs, particularly family child care programs. Survey respondents were asked how their perceptions of Parent Aware have changed since they first joined. Providers referenced the work they put into Parent Aware and their awareness over time that Parent Aware has been a helpful tool to better understand what quality child care is.

Fully-rated programs are more likely than automatically-rated programs to agree that their program is of higher quality after joining Parent Aware and that Parent Aware has been beneficial to their program. Thus, although fully-rated programs may be slightly more likely to report negative perceptions of Parent Aware, they also report benefiting from Parent Aware the most. Programs participating in Parent Aware have a number of suggestions for how to improve Parent Aware. Some of these suggestions from programs center around improving the observational component of the rating process and ensuring that the ratings are tailored to programs of different types (for example, Montessori programs and family child care programs). To date, the survey responses from participating providers indicate that they agree somewhat

(but not strongly) that Parent Aware has made an impact on their marketing and relationships with families.

Recommendations

- Build on the positive impressions of programs in Parent Aware by developing new marketing materials that share these impressions with potential enrollees. Consider developing peer-to-peer mentoring so that programs can contact another program when they have questions or concerns (in addition to contacting Parent Aware staff).

- Address programs' concerns about the observational component of the rating process. Consult with other state QRIS about strategies used to facilitate the observational process so that it is constructive and supportive for programs.

- Continue developing strategies to help programs engage and inform families about their participation in Parent Aware. Outreach materials can be developed for families already enrolled as well as prospective families who are visiting the program or looking online for information.

- Collect data from programs that chose not to pursue a second rating in Parent Aware to learn more about the reasons for exiting the program. Use the data to inform strategies for improved retention.

Section 5. RE-RATINGS AND QUALITY IMPROVEMENT

Purpose of this Section:

A central goal of Parent Aware is to support programs in improving the quality of care and education that they provide to young children. All programs receive assistance in navigating the Parent Aware rating process. Programs that have not yet earned four stars receive additional assistance to move toward achieving a four-star rating. Programs have access to technical assistance on improving the quality of their environment and on improving the quality of interactions with children, as well as financial supports to purchase needed materials and resources. In this section, we analyze whether programs are improving their ratings over time and provide a descriptive portrait of the quality improvement services they are receiving.

Key Findings:

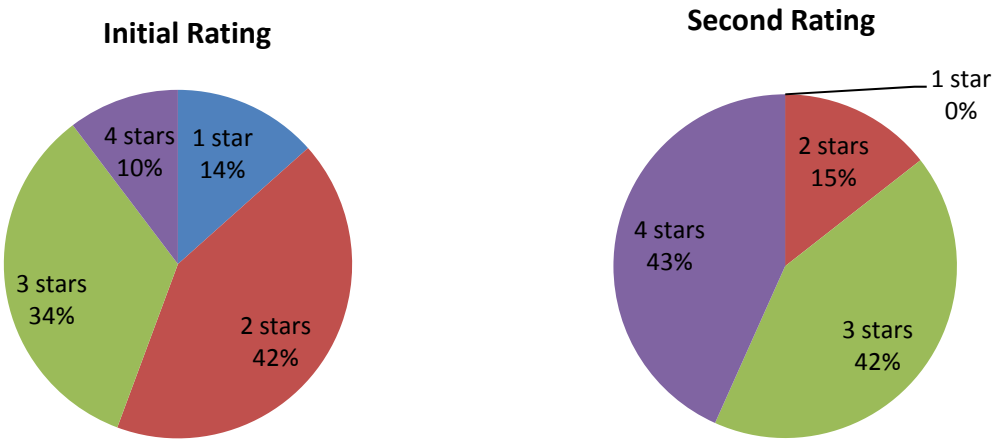
- The majority of programs that received a second rating improved their rating by at least a full star level, with family child care providers making greater improvements than center-based programs.
- Provider Resource Specialists spend an average of 8.2 hours with programs, but the dosage of this support varies widely. Provider Resource Specialists help programs assemble their documentation packets and assist with other activities that vary by program type.
- Most but not all programs receive the support of an ERS consultant (13.75 hours on average per rating), though the dosage of supports varies. ERS consultants help programs understand the ERS scoring system, rearrange the program's physical space, purchase new learning materials, and improve hand-washing and other sanitary procedures.
- CLASS coaching has been available only since mid-2010 and is only available to center-based programs serving preschoolers. Of the 13 programs about which data was available, programs received on average 23.2 hours of CLASS coaching. When asked what their CLASS coach does during visits, directors report that the CLASS coach most often observes teachers and gives feedback.
- Nearly all eligible programs take advantage of quality improvement financial supports, spending on average $2,791 on materials or resources to improve quality. The majority of the money is spent on materials for the learning environment (as opposed to teacher resource materials, equipment, assessment materials, or training/consultation).

Analysis of Re-Ratings in Parent Aware

Programs are re-rated on an annual basis in Parent Aware. At the end of the pilot, 189 programs had received a full Parent Aware rating. Just over half of these programs (97 or 51%) have received a second rating. The 97 programs include both child care centers (40) and family child care programs (57). The analysis of re-rating data in this section presents combined findings as well as separate findings for these different program types.

Overall change in star level. The majority of programs improved their star rating from their first to their second rating (Figure 10). At the second rating, no programs received one star and the proportion of 4-star programs increased from 10% to 43%. Looking by program type, 60% of centers and 70% of family child care providers improved their rating by at least one star at their second rating. One-third of family child care providers increased their rating by at least two stars, and family child care providers made significantly higher star level improvements than centers ($p<.05$).

Figure 10. Star level at initial rating and at second rating among 97 programs that have received at least two ratings



Source: Parent Aware Rating Tool database, as of September 7, 2011

Table 10 displays additional details about the pattern of overall scoring from initial rating to re-rating. It is notable that, despite the overall positive change in star level for both types of programs upon re-rating, nearly one-third (family child care programs) or more (center-based programs) experience no change or, for a small proportion of programs, a decrease in star level.

Looking at points earned upon re-rating (which determines the star level), the findings are similar. On average, family child care providers increase their overall points total by 10.0 points from their first to their second full rating, while center-based programs increase their overall points total by 5.5 points, a statistically significant difference ($p<.01$).

Table 10. Patterns in star-level changes from initial rating to second rating by program type

Change in Parent Aware Star Level	Center-based programs (N=40)	Family Child Care programs (n=57)
Decreased by two stars	3%	0%
Decreased by one star	8%	2%
No change	30%	28%
Increase by one star	43%	37%
Increase by two stars	18%	32%
Increase by three stars	0%	2%

Source: Parent Aware Rating Tool database, as of September 7, 2011

Change in the Family Partnerships category. The majority of re-rated programs (83% of centers and 61% of family child care providers) received 4 stars in the Family Partnerships category in their first rating. Thus, it was difficult to detect much improvement upon re-rating. A small number of programs (5% of centers and 7% of family child care programs) received a lower star rating in Family Partnerships at their second rating. However, most programs (78% of centers and 58% of family child care) saw no change in their Family Partnerships category star level. Those who did change usually improved by one star level (18% of centers and 28% of family child care). A small proportion (7%) of family child care providers (and no centers) improved by two or three stars in the Family Partnerships category. Overall, family child care providers improved by more points, on average, than centers, though this difference is not significant (See Table 11).

Table 11. Change in points earned in the Family Partnerships category from initial to second rating by program type

Change in Family Partnerships subtotal	Center-based programs (N=40)	Family Child Care (n=57)
Loss of 6 or more points	0%	0%
Loss of 3 to 5.5 points	3%	5%
Loss of 0.5 to 2.5 points	30%	28%
No change	23%	11%
Gain of 0.5 to 2.5 points	33%	25%
Gain of 3 to 5.5 points	13%	25%
Gain of 6 or more points	0%	7%

Source: Parent Aware Rating Tool database, as of September 7, 2011

Change in the Teaching Materials and Strategies category. Programs that have been re-rated are fairly evenly divided across Teaching Materials and Strategies star levels in their initial rating, with 28% of programs receiving 1 star, 14% receiving 2 stars, 45% receiving 3 stars, and 12% receiving 4 stars. The majority of family child care programs (53%) and nearly half of centers (45%) improved their Teaching Materials and Strategies star level in their second rating. Over 40% of centers and 35% of family child care programs saw no change in their Teaching Materials and Strategies star level, while a small portion of programs (13% of centers and 12% of family child care programs) received a lower star rating in this category at their second rating. Family child care providers improved by more points, on average, than centers in

Teaching Materials and Strategies, though this difference is not statistically significant (1.8 points compared to 1.3 points) (See Table 12).

Table 12. Change in points earned in the Teaching Materials and Strategies category from initial to second rating by program type

Change in Teaching Materials and Strategies subtotal	Center-based programs (N=40)	Family Child Care (n=57)
Loss of 6 or more points	0%	0%
Loss of 3 to 5.5 points	5%	12%
Loss of 0.5 to 2.5 points	25%	4%
No change	10%	19%
Gain of 0.5 to 2.5 points	30%	26%
Gain of 3 to 5.5 points	25%	33%
Gain of 6 or more points	5%	5%

Source: Parent Aware Rating Tool database, as of September 7, 2011

Change in the Tracking Learning category. Initial star levels in the Tracking Learning category vary for both program types, but family child care program tend to score lower in initial Tracking Learning ratings, giving them more room to improve (79% of family child care programs initially scored 1 or 2 stars, compared to 60% of centers). The majority of programs (53% of centers and 77% of family child care programs) improved their Tracking Learning star level in their second rating. Very few programs (5% of centers and 4% of family child care programs) decreased their Tracking Learning star level. Family child care providers improved by significantly more points in the Tracking Learning category than center-based programs. Family child care programs improve by 5.5 points, on average, compared to 3.1 points for centers, a statistically significant difference ($p<.001$) (see Table 13).

Table 13. Change in points earned in the Tracking Learning category from initial to second rating by program type

Change in Tracking Learning subtotal	Center-based programs (N=40)	Family Child Care (n=57)
Loss of 6 or more points	3%	0%
Loss of 3 to 5.5 points	0%	2%
Loss of 0.5 to 2.5 points	5%	7%
No change	33%	12%
Gain of 0.5 to 2.5 points	10%	2%
Gain of 3 to 5.5 points	13%	12%
Gain of 6 or more points	38%	65%

Source: Parent Aware Rating Tool database, as of September 7, 2011

Change in the Teacher Education and Training category. Similar to the pattern observed for Tracking Learning, initial star levels in the Teacher Training and Education category vary for both program types, but family child care programs tend to score lower in initial ratings, giving them more room to improve (nearly two-thirds of family child care programs initially scored one or two stars, compared to just one-third of centers). The majority of

programs (45% of centers and 56% of family child care programs) did not change their star rating in Teacher Training and Education. This lack of change reflects the fact that movement up the step levels of the Career Lattice (the foundation for the Teacher Training and Education rating) takes time. Notably, however, over one-third of programs increased their Teacher Training and Education star rating (35% of centers and 40% of family child care programs). A small number of programs (18% of centers and 4% of family child care programs) decreased their Teacher Training and Education star rating. On average, family child care providers improved by more points than centers in the Teacher Training and Education category (1.5 points compared to .7 points; see Table 14), though the difference is not statistically significant.

Table 14. Change in points earned in the Teacher Training and Education category from initial to second rating by program type

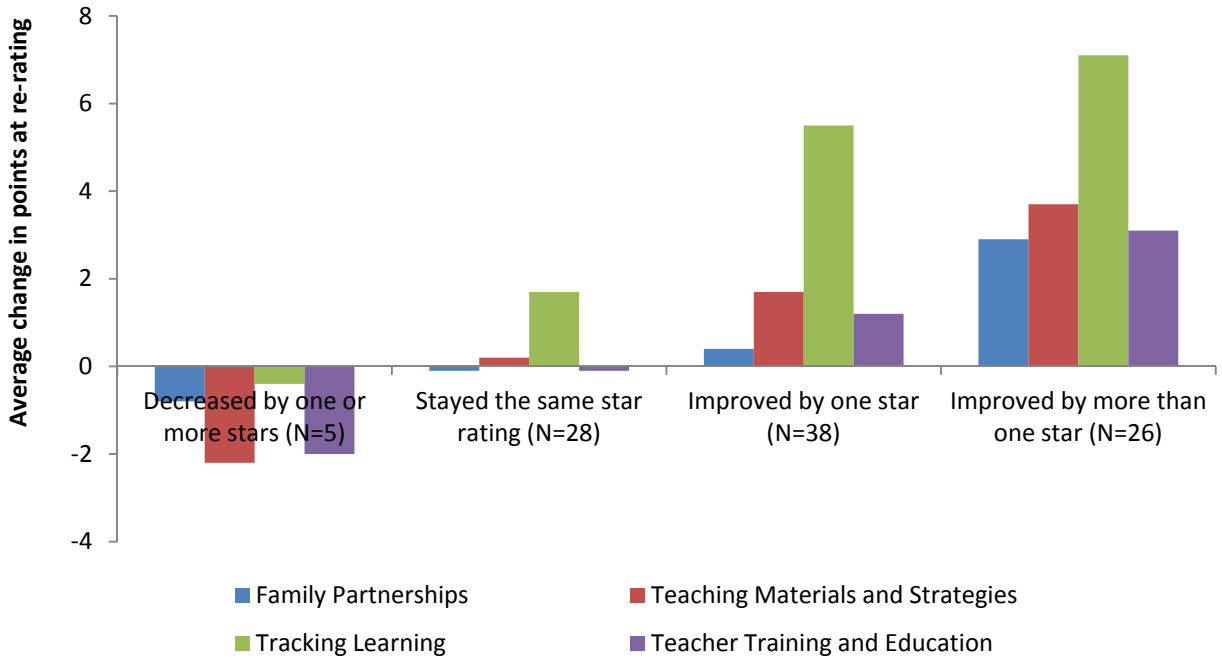
Change in Teacher Training and Education subtotal	Center-based programs (N=40)*	Family Child Care (n=57)*
Loss of 6 or more points	5%	0%
Loss of 3 to 5.5 points	13%	4%
Loss of 0.5 to 2.5 points	10%	2%
No change	18%	49%
Gain of 0.5 to 2.5 points	30%	23%
Gain of 3 to 5.5 points	18%	14%
Gain of 6 or more points	8%	9%

*Percentages sum to more than 100% because of rounding.
Source: Parent Aware Rating Tool database, as of September 7, 2011

Comparison of gains across quality categories at re-rating. One strategy for understanding patterns of scoring at re-rating is to categorize programs by the gains they make (or do not make) on the Rating Tool and to examine the points they earn across each of the quality categories.

Figure 11 shows the patterns of scoring for programs that decreased their star rating, staying the same, improved by one star, and improved by two stars. From this figure, it is clear that points earned in Tracking Learning are driving the star level gains made by programs. Loss of points in Teaching Materials and Strategies and Teacher Training and Education were most evident among programs that decreased their star level by one or more stars.

Figure 11. Patterns of scoring at the second rating among programs that decreased their star level, stayed the same or improved by one or two star levels



Source: Parent Aware Rating Tool database, as of September 7, 2011

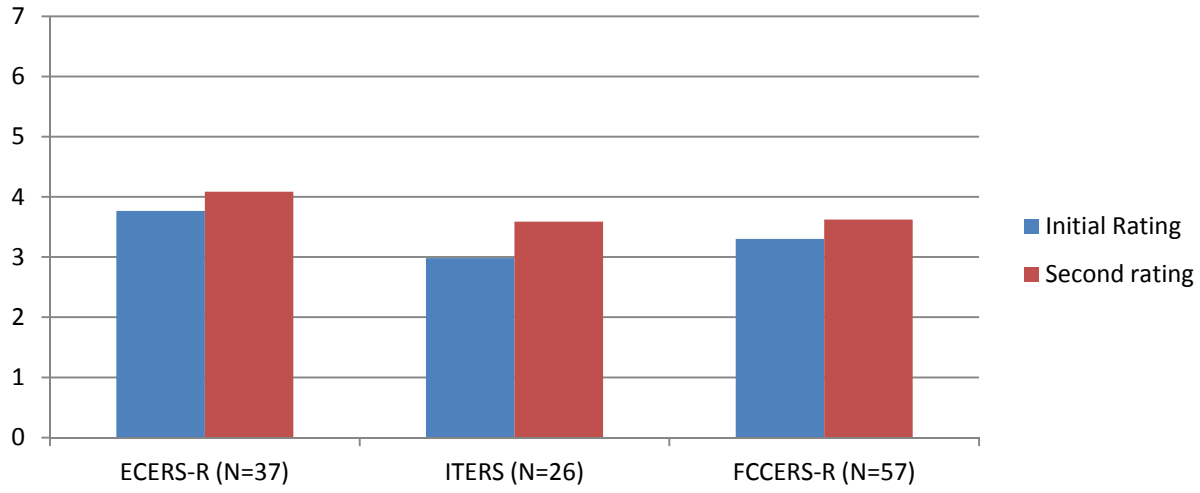
Changes in scores on the observational measures of quality: ERS. At the initial rating, fully-rated center-based programs receive an average score of 3.8 on the ECERS-R[13] (N=37) and 3.0 on the ITERS-R (N=29). Family child care programs receive an average score of 3.3 on the FCCERS-R (N=57). Centers significantly improved their ECERS-R score, earning on average .32 points more in their second rating than in their first ($p<.05$). Centers also significantly improved their ITERS-R score, earning on average .61 points more in their second rating than in their first ($p<.01$). Similarly, family child care providers significantly improved their FCCERS-R score, earning on average .32 points more in their second rating than in their first ($p<.01$).

Figure 12 displays the changes on the ECERS-R, ITERS-R, and FCCERS-R[14] from initial to second rating.

[13] In center-based programs with preschool classrooms (serving children ages 3 to 5), observers complete the Early Childhood Environment Rating Scale – Revised (ECERS-R; Harms, Clifford & Cryer, 1998) or the Infant and Toddler Environment Rating Scale Revised (ITERS-R; Harms, Cryer & Clifford, 1990) depending on the ages of children in the selected classroom (one-third of the classrooms serving each age group are randomly selected for observation).

[14] In family child care programs, observers use the Family Child Care Environment Rating Scale – Revised (FCCERS-R; Harms, Cryer & Clifford, 2007) to assess the quality of the environment, materials, routines, health and safety and interactions.

Figure 12. Change from initial rating to second rating on the ECERS-R, ITERS-R and the FCCERS-R



Source: Parent Aware Rating Tool database, as of September 7, 2011

These small overall gains in scores on the Environment Rating Scales mask some of the individual movement up (or down) on the scales. For the ECERS-R, 41% of programs lost points at the second rating, 16% didn't change their score or gained less than .5 points, and 43% gained more than .5 points (see Table 15). For the ITERS-R, 19% of programs lost points at the second rating (see Table 15), 23% didn't change their scores or gained less than .5 points, and 58% gained more than .5 points. For the FCCERS-R, 29% of providers lost points at their second rating, 30% didn't change their scores or gained less than .5 points, and 43% gained more than .5 points (see Table 16).

Table 15. Change in points on the ECERS-R and ITERS-R from initial rating to second rating

Amount of Change	Percent of center-based programs showing this change in their ECERS-R Score (N=37)	Percent of center-based programs showing this change in their ITERS-R Score (N=29)
Loss of more than 2 points	0%	4%
Loss of more than 1 point (but not more than 2)	11%	0%
Loss of more than 0.5 points (but not more than 1)	14%	0%
Loss of up to 0.5 points	16%	15%
No change or gain of no more than 0.5 points	16%	23%
Gain of more than 0.5 points (but not more than 1)	16%	38%
Gain of more than 1 point (but not more than 2)	24%	8%
Gain of more than 2 points	3%	12%

Source: Parent Aware Rating Tool database, as of September 7, 2011

Table 16. Change in points on the FCCERS-R from initial rating to second rating

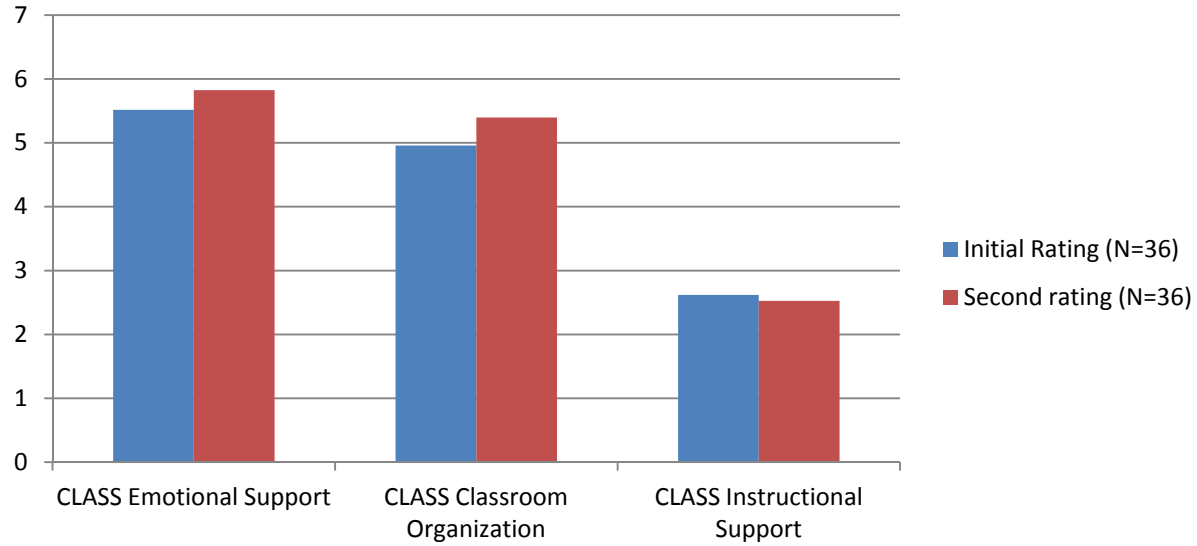
Change in FCCERS-R Score	Family child care providers (N=57)
Loss of more than 2 points	2%
Loss of more than 1 point (but not more than 2)	7%
Loss of more than 0.5 points (but not more than 1)	9%
Loss of up to 0.5 points	11%
No change or gain of no more than 0.5 points	30%
Gain of more than 0.5 points (but not more than 1)	23%
Gain of more than 1 point (but not more than 2)	18%
Gain of more than 2 points	2%

Source: Parent Aware Rating Tool database, as of September 7, 2011

Changes in scores on the observational measures of quality: CLASS. Only center-based programs that serve preschoolers are observed using the CLASS[15]. In initial ratings, average scores on the CLASS subscales were 5.5 on the Emotional Support subscale, 5.0 on the Classroom Organization subscale, and 2.6 on the Instructional Support subscale. At the second rating, programs made greater improvements on average in the Classroom Organization subscale than on other subscales (see Figure 13). Programs improved significantly on the Classroom Organization subscale, with scores .44 points higher on average, in their second rating than in their first ($p<.01$). Programs also improved significantly on the Emotional Support subscale, with scores .32 points higher, on average, in their second rating than in their first ($p<.05$). Program's scores on the Instructional Support subscale did not change significantly, with scores .11 points lower on average in the second rating than in the first. Table 17 provides details about how scores changed on each of the CLASS subscales.

[15] Observers complete the Classroom Assessment and Scoring System (CLASS; Pianta, La Paro & Hamre, 2008) to assess the quality of emotional support, instruction, and classroom organization.

Figure 13. Change from initial rating to second rating in scores on the CLASS



Source: Parent Aware Rating Tool database, as of September 7, 2011

Table 17. Change in points on the CLASS subscales from initial rating to second rating

	Percent of Center-based programs showing this change (N=34)		
Amount of Change	Emotional Support	Classroom Organization*	Instructional Support *
Loss of more than 2 points	0%	3%	9%
Loss of more than 1 point (but not more than 2)	9%	6%	15%
Loss of more than 0.5 points (but not more than 1)	3%	0%	6%
Loss of up to 0.5 points	26%	15%	21%
No change or gain of no more than 0.5 points	29%	32%	21%
Gain of more than 0.5 points (but not more than 1)	9%	21%	15%
Gain of more than 1 point (but not more than 2)	21%	18%	12%
Gain of more than 2 points	3%	6%	3%

*Percentages sum to more than 100% because of rounding.
Source: Parent Aware Rating Tool database, as of September 7, 2011

Analysis of Quality Improvement Supports

Parent Aware provides multiple forms of supports to assist programs in completing the rating process and improving their rating. Participants in Parent Aware who enroll in the full rating pathway receive technical assistance from up to three individuals: a Provider Resource Specialist, an ERS Consultant, and a CLASS Coach. Programs may also benefit from funds that are designated to purchase needed materials, resources, or trainings to improve program quality. In this section, we provide descriptive information about the technical assistance provided to Parent Aware participants.

Provider Resource Specialists. The primary support for providers is their Provider Resource Specialist, an individual who facilitates the rating process and oversees the quality improvement process. Parent Aware has seven Provider Resource Specialists, with two Provider Resource Specialists who provide supports to English-speaking providers in the metro area (the majority of providers), another who provides supports to English-speaking providers in Blue Earth/Nicollet, and four bilingual Provider Resource Specialists that serve English Language Learners in Spanish, Somali, and Hmong. Every provider seeking a full rating can access the support of a Provider Resource Specialist.

To learn more about the work of Provider Resource Specialists (PRS), two types of data were collected. First, the PRSs were asked to provide detailed information about the supports provided in preparation for each of the ratings issued on or after January 1, 2011. These data include information about the supports provided by Provider Resource Specialists to 83 fully rated programs including 34 center-based programs and 49 family child care providers. Second, family child care providers and center directors were asked to report on the supports provided by Provider Resource Specialists in the Parent Aware Evaluation survey distributed in Spring/Summer 2011. In this section, we report on the responses of providers and directors in fully-rated Parent Aware programs (41 family child care providers and 36 directors of center-based programs) because only fully-rated programs are eligible for Quality Improvement supports.

Provider Resource Specialists were asked to report the exact hours of direct contact provided and the exact number of visits made to a program per rating cycle. They reported providing 3 to 30 hours of supports per cycle, with the average cycle including 8.2 hours of direct contact over 3.6 site visits. PRSs report spending twice as many hours of direct contact with providers who are English Language Learners (ELL), on average, than non-ELL providers (12.7 hours compared to 6.2 hours, $p<.0001$). In addition, rating cycles involving family child care providers consist of significantly more PRS hours, on average, than cycles serving center-based programs (9.9 hours compared to 6.3 hours, $p<.001$).

Provider Resource Specialists reported that they work with the family child care provider in family child care programs and nearly always work with the director in center-based programs, although PRSs report spending their time equally between the director and the classroom teachers in 5% of center-based programs.

In the Parent Aware Evaluation survey, providers were asked, "For how many months did you work with your PRS in the last 12 months?" and were given five options from which to choose. The distribution of their responses is described in Table 18. Most family child care providers (56%) reporting working with a PRS for 2 months or less while most centers (60%) reported working with a PRS for 5 months or more.

Table 18. Provider-report of months spent working with a Provider Resource Specialist in the last year

Duration of support	Fully-rated family child care providers (N=41)	Fully-rated center directors (N=35)	Combined fully-rated family child care providers and center directors (N=76)
0 months	17%	6%	12%
1-2 months	39%	26%	33%
3-4 months	24%	9%	17%
5-6 months	10%	14%	12%
more than 6 months	10%	46%	26%

Source: 2011 Parent Aware Evaluation Survey data from 41 fully-rated family child care provider and 35 directors of fully-rated, center-based programs.

Providers were also asked to estimate the total number of hours that they spent working with their PRS in the past 12 months and were given five options from which to choose. The distribution of their responses is described below in Table 19. Most family child care providers (56%) and most center directors (51%) reported spending fewer than five hours with their Provider Resource Specialist over the last year.

Table 19. Provider report of total hours spent working with a Provider Resource Specialist in the last year

Total hours of PRS support	Fully-rated family child care providers (N=39)	Fully-rated center directors (N=35)	Combined fully-rated family child care providers and center directors (N=74)
<5 hours	56%	51%	54%
5-10 hours	31%	29%	30%
11-20 hours	10%	14%	12%
21-40 hours	3%	6%	4%
41-75 hours	0%	0%	0%

Source: 2011 Parent Aware Evaluation Survey data from 39 fully-rated family child care provider and 35 directors of fully-rated, center-based programs.

For each rating, Provider Resource Specialists were asked, "Which of the following activities did you spend the most time on when working with this provider?" Respondents were then asked which activity they spent the second most time on and which activity they spent the third most time on.

Table 20. Provider Resource Specialist report of their most common activities with providers during a rating cycle

	Percent of rating cycles in which the PRS identified activity as one of the top three activities they spent the most time on	
Activity	**Cycles with Family child care providers (N=44)**	**Cycles with Center-based programs (N=39)**
Assembling the documentation packet	84%	95%
Helping design activities to get families more involved	14%	0%
Preparing the program for their ERS observations	82%	51%
Getting a curriculum in place	39%	5%
Getting an assessment tool in place	27%	8%
Getting the provider/staff on the Professional Development Registry	7%	36%
Helping design a Professional Development Plan	0%	3%
Picking out new materials or equipment for the program	36%	56%

Source: Provider Resource Specialists, reporting on 83 full ratings, across 34 center-based programs and 49 family child care providers, issued on or after January 1, 2011.

Provider Resource Specialists' most commonly reported activities were "Assembling the documentation packet" and "Preparing the program for their ERS observation." In 80% of cycles, "Assembling the documentation packet" was the activity done most often or second most often. In 53% of cycles, "Preparing the program for their ERS observation" was the activity done most often or second most often. Other activities that were identified as among the three activities that the PRS spent the most time on with the program were: Picking out new materials or equipment for the program (in the top three for 46% of rating cycles), Getting a curriculum in place (only common for family child care providers), and Getting the provider/staff on the Professional Development Registry (only common for center-based programs).

Providers also were asked to report on the three primary things that they worked on with their PRS and were given a list of options from which they could choose up to three. These options aligned with those reported on by the Provider Resource Specialists.

Table 21. Provider report of most common activities worked on with a Provider Resource Specialist

	Percent of providers who identify activity as one of the top three activities they worked on with their PRS	
Activity	**Family child care providers (N=38)**	**Center directors (N=33)**
Assembling the documentation packet	89%	97%
Getting my families more involved	18%	6%
Preparation for my ERS observations	58%	42%
Getting a curriculum in place	29%	18%
Getting an assessment tool in place	21%	6%
Getting on the Professional Development Registry	21%	21%
Designing a Professional Development Plan	21%	12%
Picking out new materials or equipment for my program	26%	45%

Source: 2011 Parent Aware Evaluation Survey data from 39 fully-rated family child care provider and 35 directors of fully-rated, center-based programs.

As seen in Table 21, "Assembling the documentation packet" was the most commonly chosen item by both family child care providers and center directors, with 89% of family child care providers and 97% of center directors identifying this as one of their three primary activities with PRSs. Other commonly reported items across both program types were, "Preparation for my ERS observation" (58% of family child care providers and 42% of center directors), and "Picking out new materials or equipment for my program" (26% of family child care providers and 45% of center directors). Family child care providers were more likely to identify "getting a curriculum in place" as a primary activity than were center directors (29% of family child care providers compared to 18% of center directors).

The reports from Provider Resource Specialists and providers on the "three most common activities" they participated in together were quite consistent with both groups reporting that preparation of the documentation packet was their most common joint activity.

Next, Provider Resource Specialists were asked to designate, for each program they served, whether the program has "fewer needs" than other programs, "more needs" than other programs, or "about the same needs" as other programs. Provider Resource Specialists report making more visits and spending more hours with programs they perceived as having higher needs than with programs they perceived as having fewer needs.

Table 22. Patterns of support and improvement reported by Provider Resource Specialists for programs with varying needs

	Average Contact Hours	Average Number of Site Visits	Percent who are "Very engaged and open to receiving support"	Previous star rating (if applicable)	Resulting star rating
Programs with fewer needs (N=30, 24 with previous ratings)	5.6 hours	2.7 visits	57%	3.4	3.5
Programs with average needs (N=33, 15 with previous ratings)	8.8 hours	3.7 visits	90%	2.3	2.9
Programs with more needs (N=20, 9 with previous ratings)	11.2 hours	4.8 visits	85%	2.4	2.5

Source: Provider Resource Specialists, reporting on 83 full ratings, across 34 center-based programs and 49 family child care providers, issued on or after January 1, 2011.

Provider Resource Specialists also were asked to report how engaged and open each program was to receiving their support. They could choose from the following options: "Very engaged and open," "Somewhat engaged and open," "Somewhat disengaged or hesitant," or "Very unengaged." Provider Resource Specialists reported that the provider was "very engaged and open" in 77% of cycles. As shown in Table 22, Provider Resource Specialists reported that programs with average or high needs were more likely to be "very engaged and open" than programs with fewer needs.

One strategy Provider Resource Specialist may be using to gauge the distribution of their time across the providers on their caseload is to base their time allocation on a program's star rating (if they have already been rated). Programs that have already achieved a high rating might be described as having fewer needs because they have fewer improvements to make.

Table 22 shows that, indeed, a program's previous star rating is linked with the Provider Resource Specialists' designation as having "fewer needs." Programs designated as having fewer needs were more likely to have been rated previously and to have significantly higher previous star ratings than programs described as having "average needs" or "more needs."

Provider Resource Specialists may also designate programs as having more needs when programs have not achieved a high star rating (note that PRSs completed these ratings after they knew the outcomes of a provider's rating cycle).

Table 22 shows that programs with more needs improve by just one-tenth of a star, on average, compared to six-tenths of a star for programs with average needs. Programs with low needs only improved by one-tenth of a point, but this may be due to the fact that their previous average rating was already relatively high.

ERS Consultants. The role of the ERS Consultant in Parent Aware is to teach the provider about the ERS that is appropriate for their setting, assist the provider in assessing their environment, and offer consultation on how the provider can improve the environment. There are five individuals trained to be ERS consultants for Parent Aware providers, but one ERS consultant carries 45% of the caseload. Four of the five ERS consultants serve both center-based programs and family child care providers. One ERS consultant works exclusively with Hmong providers.

To learn more about the work of ERS Consultants, data was collected from three sources. First, the Minnesota Department of Human Services hired a consultant to assemble a record of ERS consultation provided per rating cycle using data that was collected for the FY2008, FY2009 and FY2010 annual report of the Professional Development System. Second, ERS Consultants were asked to provide detailed information about the supports provided in preparation for each of the ratings issued on or after June 1st, 2010. These combined data include information about the ERS consultation provided to 83 full ratings of 77 unique programs (29 center-based programs and 48 family child care providers). Third, Parent Aware-rated providers completed the Parent Aware Evaluation survey questions about their experience working with an ERS Consultant. Of those who completed the survey, 25 family child care providers and 17 center directors reported that they had worked with an ERS consultant.

ERS consultants reported providing 2 to 40 hours of consultation per program per rating cycle, with the average cycle including 13.75 hours of direct contact over 6.4 visits. ERS consultation cycles involving family child care providers consisted of significantly more hours of consultation, on average, than cycles serving centers (15.0 hours and 12.0 hours respectively, $p<.05$). In center-based programs, ERS consultants often worked with more than one classroom within the center. ERS consultants reported working with 1 to 7 classrooms per center, but the majority of cycles (86%) involved no more than 3 classrooms.

To better understand how ERS consultants allocate their time across providers at different star levels, average hours by star level were compared by provider type. Family child care providers who receive a 2- or 3-star rating receive more hours of ERS consultation than family child care providers who receive a 4-star rating (16.9 hours compared to 10.6 hours, $p<.01$). However, for centers, there is no significant difference in hours of ERS consultation provided by star rating.

In the Parent Aware Evaluation survey, fully-rated family child care providers and center directors who worked with an ERS consultant[16] were asked, "For how many months did you work with your ERS Consultant in the last 12 months?" Their answers are summarized in Table 23. Notably, 34% of fully-rated family child care providers and 53% of fully-rated center directors said that they never worked with an ERS consultant. This is largely attributable to the

[16] Fourteen family child care respondents and 19 center directors reported that either a) they did not have an ERS Consultant or b) that they spent 0 months working with their ERS consultant AND less than five total hours working with their ERS consultant AND reported having not worked on anything with the ERS consultant. These respondents were not included in the following analyses. These providers may nonetheless have had an ERS consultant.

fact that many (36%) of the fully-rated providers who completed the survey are from programs that had already received a four star rating and were thus not eligible for ERS consultation.

Table 23. Provider report of months spent working with an ERS consultant

Duration of ERS consultation	Fully-rated family child care providers (N=25)	Fully-rated center directors (N=17)	Combined fully-rated family child care providers and center directors (N=42)
0 months	12%	6%	10%
1-2 months	44%	53%	48%
3-4 months	36%	18%	29%
5-6 months	0%	6%	2%
more than 6 months	8%	18%	12%

Source: 2011 Parent Aware Evaluation Provider Survey

The most commonly reported duration for ERS consultation, among both family child care and centers, was one to two months. A small portion of programs (12% across program types) reported working with an ERS consultant for more than six months.

Providers were also asked to estimate the total number of hours they worked with an ERS Consultant in the past 12 months and were given five options from which to choose. Table 24 shows the distribution of responses. Most family child care providers (68%) reported working with an ERS consultant for less than five hours, while most center directors reported working with an ERS consultant for five to ten hours. Less than 10% of programs reported working with an ERS consultant for more than 10 hours in the last 12 months.

Table 24. Provider report of total hours spent working with an ERS consultant

Total hours of ERS consultation	Fully-rated family child care providers (N=25)	Fully-rated center directors (N=17)	Combined fully-rated family child care providers and center directors (N=42)
<5 hours	68%	41%	57%
5-10 hours	20%	53%	33%
11-20 hours	8%	6%	7%
21-40 hours	4%	0%	2%
41-75 hours	0%	0%	0%

Source: 2011 Parent Aware Evaluation Provider Survey

In the Parent Aware Evaluation survey, providers who reported working with an ERS consultant were asked, “What are the three primary things you worked on with your ERS Consultant?”

Table 25. Provider report of most common activities worked on with an ERS Consultant

	Percent of providers who identify activity as one of the top three activities they worked on with their ERS Consultant	
Activity	**Family child care providers (N=25)**	**Center directors (N=17)**
Understanding the ERS scoring system	60%	76%
Rearranging the physical space	60%	65%
Hand washing and other sanitary procedures	52%	41%
Working on the outside/playground equipment	16%	6%
(Re-) structuring the daily schedule	16%	24%
Purchasing new materials for learning activities	52%	47%
Purchasing new materials that demonstrate diversity	28%	12%
Purchasing new materials for the physical space	40%	18%

Source: 2011 Parent Aware Evaluation Survey

As seen in Table 25, the four most common activities providers reported spending time on with their ERS consultant were: Understanding the ERS scoring system, Rearranging the physical space, Purchasing new materials for learning activities, and Hand washing and other sanitary procedures.

Like Provider Resource Specialists, ERS consultants were asked to report how engaged and open each program was to receiving their support. ERS consultants report that providers are "very engaged and open to consultation" in the majority (79%) of rating cycles. However, they are significantly more likely to report that family child care providers are "very engaged and open" than centers (85% compared to 68%, $p<.10$). ERS consultants report that they spent more time with programs that were highly engaged in the consultation process than with programs that were less engaged. Programs that were described by ERS consultants as "very engaged and open" received significantly more hours of ERS consultation than programs that were described as not as engaged or open to consultation (15.6 hours compared to 9.5 hours, $p<.01$).

To generate initial evidence for the effectiveness of ERS consultation, the ERS scores of programs that received any amount of ERS consultation in preparation for their observation can be compared with the ERS scores of programs that did not receive any consultation. These analyses yield mixed evidence of the impact of ERS consultation. There are no significant difference in the ECERS-R scores or ITERS-R scores of fully-rated center-based programs that receive ERS consultation prior to their observation and fully-rated center-based programs that did not receive ERS consultation. In contrast, family child care providers that received any amount of ERS consultation in preparation for their ERS observation demonstrate significantly higher FCCERS-R scores than family child care ratings that did not receive ERS consultation (average score of 3.5 compared to 3.3 respectively, $p<.10$).

It is also informative to examine the relationship between a program's dosage of ERS consultation and the program's overall ERS score. Results again are different for center-based programs than for family child care providers. For center-based programs, neither ECERS-R scores nor ITERS-R scores are significantly correlated with the number of hours of ERS consultation provided. For family child care providers, however, there was a trend indicating that hours of ERS consultation are negatively correlated with FCCERS-R scores ($p<.10$). In other words, family child care providers that receive more hours of ERS consultation also receive lower FCCERS-R scores. This corroborates the notion that ERS consultants spend more time with programs that need more help.

CLASS Coach. The role of the CLASS Coach is to teach the provider about the CLASS measurement tool and how to score interactions between children and providers. The CLASS Coach also provides coaching on how the provider can improve teacher-child interactions. Because the CLASS is only administered in center-based settings that serve preschool-age children, not every program is eligible to receive CLASS coaching. Parent Aware has two CLASS coach positions, with one coach who provides supports to the metropolitan area (the majority of providers) and a second who provides supports in Blue Earth/Nicollet counties. In the past year, there was turnover in the CLASS Coach position in the metropolitan area, so 3 individuals have served as CLASS coaches. To learn more about the work of CLASS Coaches, data was collected from two sources. First, the CLASS coaches were asked to provide detailed information about the supports provided in preparation for each of the ratings issued on or after July 1, 2010. According to the CLASS coaches, there have been 13 cycles of CLASS coaching delivered to 13 center-based programs since CLASS coaching was first offered in 2010. Second, data was collected through the Parent Aware Evaluation survey of providers. Directors of fully-rated center-based programs were asked to report on their experience working with a CLASS Coach.

CLASS Coaches report providing 4 to 67 hours of consultation per program, with the average cycle including 23.2 hours of direct contact over 8.8 site visits. In all 13 cases, CLASS Coaches reported working with one or two classrooms per center.

Directors of fully-rated child care centers who reported working with a CLASS Coach were asked, "For how many months did you work with your CLASS coach in the last 12 months?" The distribution of their responses is presented in Table 26. The duration of coaching appears to vary widely, but the majority of directors (65%) reported that their program worked with a CLASS coach for one to four months.

Table 26. Provider report of duration of time spent working with a CLASS Coach

Duration of CLASS coaching	Fully-rated Center Directors (N=17)
0 months	0%
1-2 months	41%
3-4 months	24%
5-6 months	12%
more than 6 months	24%

Source: 2011 Parent Aware Evaluation Provider Survey

Directors were then asked to estimate the total number of hours they worked with a CLASS coach in the past 12 months. Table 27 shows that the total number of hours varied widely with approximately one-third (35%) reporting working with a CLASS Coach for less than five hours, another third (30%) working with a CLASS Coach for 5 to 20 hours, and the remaining third (35%) working with a CLASS Coach for over 20 hours.

Table 27. Provider report of total hours spent working with a CLASS Coach

Total hours of CLASS coaching	Fully-rated Center Directors (N=17)
<5 hours	35%
5-10 hours	18%
11-20 hours	12%
21-40 hours	18%
41-75 hours	6%
More than 75 hours	12%

Source: 2011 Parent Aware Evaluation Provider Survey

To understand what is involved in CLASS coaching, directors who worked with a CLASS Coach were asked, "What are the three primary things you worked on with your CLASS Coach?" Their responses are summarized below in Table 28.

Table 28. Provider report of most common activities worked on with a CLASS Coach

Activity	Percent of Center directors who identify activity as one of the top three activities they worked on with their CLASS Coach (N=17)
Observing me teach and giving me feedback	76%
Watching videos of other teachers teaching	18%
Helping me understand the CLASS scales	41%
Helping me understand the CLASS scoring system	35%
Modeling best teaching practices with me	24%
Videotaping myself teaching and watching it to learn how to improve	12%
Helping me learn ways to support children emotionally	12%
Helping me organize my classroom processes to aid children's learning	59%
Helping me learn how to support children's cognitive and language development	29%

Source: 2011 Parent Aware Evaluation Provider Survey

The most common responses from center directors on activities they engage in with their CLASS Coach were: Observing me teach and giving me feedback, Helping me organize my classroom processes to aid children's learning, Helping me understand the CLASS scales, and Helping me understand the CLASS scoring system.

Like Provider Resource Specialists and ERS Consultants, CLASS coaches were asked to report on each providers' openness to coaching. Unlike Provider Resource Specialists and ERS

Consultants, CLASS coaches reported a wider range of engagement among the providers they serve. While PRSs and ERS Consultants each described over 75% of providers as "very engaged," CLASS coaches report that only 38% of providers are "very engaged." In fact, they report that in 23% of coaching cycles, the provider was "Somewhat disengaged or hesitant."

To better understand the impact of CLASS coaching, the CLASS scores of programs that received CLASS coaching prior to their CLASS observation can be compared to programs that did not receive CLASS coaching. Fully-rated programs that receive CLASS coaching (regardless of dosage) score significantly higher on the Emotional Support subscale and on the Classroom Organization subscale than fully-rated programs that do not receive CLASS coaching ($p<.05$ and $p<.01$, respectively). However, these differences may be attributed to the year of the rating as more recent ratings have significantly higher Emotional Support scores and Classroom Organization scores than ratings in earlier years ($p<.01$ for both subscales). In contrast, there is no significant difference in scores on the CLASS-Instructional Support subscale between fully-rated programs that receive CLASS coaching and fully-rated programs that do not, nor is there a year effect on this subscale.

Examining the relationship between dosage of CLASS coaching and CLASS scores revealed no significant correlations. Due to the small number of programs that have received CLASS Coaching (N=13), it is difficult to draw conclusions about its impact at this point.

QIS Expenditures. In addition to technical assistance, fully-rated programs who receive fewer than four stars in their rating are eligible for financial assistance in purchasing materials or resources needed to make quality improvements. To understand how these quality improvement monies are distributed, we analyzed the administrative records of expenditures made. The Minnesota Department of Human Services tracks how much money is spent on quality improvements for each program. These numbers are complicated by the fact that Parent Aware receives discounts from vendors. The numbers recorded are the initial price, before the Parent Aware discount, so they do not precisely reflect actual expenditures by Parent Aware.

Data were available for 239 ratings (for 183 distinct programs) issued by June 30, 2011. Administrative records show that an additional 21 ratings have been eligible for financial assistance for quality improvement but have not used the available funds. Among programs who received some amount of financial assistance, total quality improvement expenditures per rating range from $25 to $7,775, with a mean expenditure of $2,791. Among these 239 programs, 21% spent less than $2000, 32% spent $2000 to $2999, 39% spent $3000 to $3999 and 8% spent $4000 or more. The average expenditure per rating was higher for family child care programs than for center-based programs ($2923 compared to $2604, $p<.05$).

How are Parent Aware quality improvement supports used? Expenditures are sorted into five categories:

- Teacher resource materials (curriculum manuals, etc),
- Materials for the learning environment (toys, dolls, puppets, felt boards, craft supplies)
- Equipment (playground equipment, climbers, shelves, portable sinks),
- Assessment (digital cameras, reproducible masters, etc),
- Training and consultation.

Table 29 shows the average spending in each category per rating.

Table 29. Average expenditure per category

Category of expenditures	Average pre-discount expenditure per rating	Average portion of total expenditure
Teacher resource materials (curriculum manuals, etc)	$58	3%
Materials for the learning environment (toys, dolls, puppets, felt boards, craft supplies, etc)	$1,686	59%
Equipment for the learning environment (playground equipment, climbers, shelves, portable sinks)	$951	33%
Assessment (digital cameras, reproducible masters, etc)	$18	1%
Training and consultation	$78	4%

Source: Minnesota CCR&R Network as of August 8, 2011

As Table 29 shows, the majority of spending happens in the Materials for the learning environment category and in the Equipment category. Less than 10% of total expenditures are spent across the three other categories. Some differences are seen in the spending patterns of family child care providers compared to center-based programs. On average, family child care providers spent a significantly lower percentage of their quality improvement funds on Training and consultation than did center-based programs (2% compared to 7%, $p<.05$). Family child care providers also spent a significantly higher percentage of their quality improvement supports on Equipment for the learning environment than did center-based programs (37% compared to 27%, $p<.01$).

What patterns can be found in the quality improvement expenditures? The amount of money spent per rating varies according to the Parent Aware program budget (determining how much money is available for the year) and also by the number of programs that join Parent Aware each year (determining among how many programs the money will be divided). As is shown in Table 30, average expenditures on quality improvement supports per rating have been decreasing over time. These year-to-year differences are all statistically significant at the $p<.05$ level.

Table 30. Pattern of expenditures over time

Year	Average expenditure on quality improvement supports per rating
2008	$3560
2009	$3128
2010	$2749
2011	$2749

Source: Minnesota CCR&R Network as of August 8, 2011

While financial assistance for quality improvement is an important benefit for programs participating in Parent Aware, programs also expend additional funds out of their own budgets to improve the quality of their program. In the Parent Aware Evaluation survey, providers were given a list of potential areas that could be targeted for quality improvement. Providers were then asked to report on the three areas in which they or their program spent the most money to make quality improvements over the past 12 months. Providers were asked not to include any materials, items, or trainings purchased or provided by Parent Aware (see Table 31).

Table 31. Quality improvement areas targeted by program in Parent Aware

	Percent of programs who listed target area as one of the three areas in which they spent the most money in the past 12 months	
Target area	**Percent of family child care providers (N=37)**	**Percent of center-based programs (N=67)**
Training, education, and professional development (for you or your staff)	24%	45%
Curriculum tools	14%	25%
Assessment tools	11%	13%
Playground equipment	11%	15%
Renovations to the building or physical space	22%	15%
Supplies, games, books, toys, materials for the classroom	86%	60%
Materials specifically for children with special needs	0%	1%
NAEYC or other national accreditation	5%	19%
Increase staff wages, hire additional staff, increase staff benefits	14%	22%
Enrichment programs for children (e.g., art, storyteller)	11%	6%
Relationships with families (e.g. newsletter, website)	0%	6%

Source: 2011 Parent Aware Evaluation Provider Survey

Are there differences by program type in the types of quality improvement being targeted? As seen in Table 31, across both program types, the most common target for quality improvement expenditures was "supplies, games, books, toys, and other materials for the classroom." The second most common target was "training, education, and professional development." Despite these commonalities, differences emerged between family child care providers and center-based programs. Family child care providers were less likely than centers to report spending money on training and education, curriculum tools, staff benefits, and accreditation. Centers were less likely to report spending money on renovations to their physical space or on supplies, games, books, toys, and other materials for the classroom. Moreover, a number of family child care providers (19%) described an additional category of expenditures that includes a variety of equipment for inside the home, including cribs, changing tables, chairs, and cubbies.

How much are providers spending of their own resources on quality improvement? Providers were asked to approximate the amount of money that has been spent in each of the three areas described in Table 31 in which they reported spending the most money for quality improvement. The three amounts provided were then summed to create an estimate of the total amount of money spent by a program on quality improvement in the last 12 months. Among the 32 FCC providers who provided information about the amount of money spent on quality improvement, the average expenditure was $4,927, with 16% of providers reporting spending over $10,000 on quality improvement in the last 12 months. Among the 57 center directors who

provided information about the amount spent on quality improvements, the average expenditure was $30,576, with 46% of these providers reporting spending over $10,000 on quality improvement.

What are the three most important quality improvements that programs have made over the previous 12 months? Providers were asked to list the top three most important quality improvements they made to their program within the past 12 months. (Improvements may or may not have been provided by Parent Aware.) Themes emerged based on whether the program was a child care center or a family child care program. Center directors - regardless of rating type - reported that the most important quality improvement they made was in the area of staff training, professional development, and other efforts to increase the qualifications of staff. Family child care providers, on the other hand, cited equipment improvements as their most important quality improvements.

Provider Perceptions of Parent Aware Quality Improvement Supports

Fully-rated programs were asked to rate the helpfulness of each of the supports provided to their program through Parent Aware. Responses are provided in Table 32.

Table 32. Provider perceptions of the helpfulness of Parent Aware supports

Support (Combined fully-rated family child care providers and center director respondents)	Very helpful	Somewhat helpful	Neutral or Not very helpful	N/A
My Provider Resource Specialist (N=73)	53%	28%	17%	3%
My ERS Consultant (N=72)	34%	17%	17%	32%
Free training (N=76)	65%	12%	17%	5%
Free curriculum materials (N=75)	65%	15%	11%	9%
Free assessment materials (N=75)	61%	14%	15%	11%
Quality improvement supports (N=72)	61%	16%	13%	10%
Translation and interpretation services (N=72)	8%	7%	11%	72%
The feedback reports from the ERS observations (N=71)	36%	20%	36%	9%
Parent Aware publicity and marketing materials (N=76)	24%	19%	44%	13%
The Parent Aware website (N=75)	15%	23%	50%	12%

Source: 2011 Parent Aware Evaluation Survey. Note that "quality improvement supports" is the term used by Parent Aware to describe the financial assistance that is available through the PRS to purchase needed resources to make quality improvements.

Table 32 shows that free training, free curriculum materials, free assessment materials, and quality improvement supports (financial assistance) were the supports most often perceived as very helpful. Over 50% of providers perceived their Provider Resource Specialists to be "very helpful." About one-third of providers reported that their ERS Consultant was very helpful while another one-third reported that they had not used ERS Consultant (category was "not applicable").

Family child care providers had more positive perceptions of the helpfulness of free training than did center-based programs ($p<.01$) and more positive perceptions of the helpfulness of quality improvement supports (financial supports) than did center-based programs ($p<.05$). No other significant differences were noted between program types.

Automatically-rated centers were asked for their perceptions about the helpfulness of ERS feedback reports, PA marketing materials, and the Parent Aware website. Automatically-rated programs were more likely to report that these supports were not applicable, but if they did not select non-applicable, they were more likely than fully-rated programs to report that these supports were somewhat or very helpful.

Providers were asked to identify the top three most helpful Parent Aware supports. Providers were given a list of supports from which to choose (see Table 32 for the list of supports). The following lists summarize their responses.

- Items most often in the top three for fully-rated directors are listed below. The item most often listed as most helpful was the Provider Resource Specialist (12).
    - Provider Resource Specialist (23)
    - Free training (17)
    - Quality improvement supports (18)
    - Free curriculum materials (10)
- Items most often in the top three for fully-rated family child care providers are listed below. The item most often listed as most helpful was the Provider Resource Specialist (13).
    - Free training (26)
    - Provider Resource Specialist (21)
    - Free curriculum materials (14)
    - Free assessment materials (12)
    - Quality improvement supports (11)
- Items most often in the top three for automatically-rated directors and family child care providers are listed below. The item most often listed as most helpful was the ERS feedback reports (11).
    - Parent Aware publicity and marketing materials (21)
    - The Feedback Reports from the ERS and CLASS Observations (18)
    - The Parent Aware website (18)

Fully-rated providers were asked to report their agreement with statements about Parent Aware quality improvement supports. Providers report feeling most strongly about their enjoyment of working with their Provider Resource Specialist. See Table 33 for providers' perceptions of Parent Aware Quality Improvement Supports.

Table 33. Provider perceptions of Parent Aware Quality Improvement supports

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
I joined Parent Aware primarily to receive Quality Improvement supports.	11%	7%	22%	35%	25%
I enjoy working with my Provider Resource Specialist.	2%	3%	24%	14%	56%
I learn a lot from my Provider Resource Specialist.	5%	8%	26%	19%	42%

Source: 2011 Parent Aware Evaluation Survey

Obstacles to Improving Quality

Providers were asked in the Parent Aware Evaluation survey to report the biggest obstacles to improving the quality of their program. Center directors reported that lack of money and time are their biggest obstacles to improving their quality; family child care providers cited the constraints posed by their physical space as their biggest obstacle to better quality.

Fully-rated directors report lack of time and money as their biggest obstacle to improving quality. Directors cite various reasons for lack of money including few grant opportunities and decreased tuition dollars due to low child enrollment.

- "Time. We are a very small center so getting things done is difficult and with no funds - to add staff hours it was tough."
- "Financial restrictions which include the current economy, job losses, ending of this fine program, legislative cuts to CCAP and Parent Aware, and limited grants available to faith based early childhood programs. These all restrict continuing fiscal monies funded to improvement areas."
- "Financially it is expensive to offer high quality trainings to all staff. We have had to limit some trainings to full time staff only."
- "Low enrollment - lack of money."
- "We didn't have the funds. Without Parent Aware we would have not been able to get the things we needed."
- "Finances - low-income families can pay only about 1/3 of the cost of care. We have to find grant money and private donors."
- "Funding to purchase materials or make capital improvements required by ERS, Parent Aware and NAEYC."
- "Time - Parent Aware paperwork expectations take too much time from the children. Online CC [Creative Curriculum] Gold requires too much computer time by staff. Most programs do NOT have computers for all or even 1:4 of staff."

Fully-rated directors reported that finding qualified staff was an obstacle to improving their quality. Some cited a lack of money as the reason behind this struggle.

- "Finding qualified staff that will work for wages we offer."
- "Teacher qualifications and training. Program budget."
- "The availability of qualified staff."

- "Staff turnover."
- "Not being able to hire people in the community who know the culture because they do not have the education in place. (Now that we are accredited, staff need to have their credentials in place at time of hire)."

Automatically-rated directors also reported that money is their greatest obstacle to improving the quality of their care. Their comments centered more on the difficulty of providing professional development and educational opportunities to their staff.

- "Money and time. We do not have enough money to purchase all of the necessary curriculum tools, assessment tools, furniture, etc. while affording high quality staff."
- "Cost of education. Trying to get and keep staff with degrees."
- "The biggest obstacle is financial. The child care authorization system makes it very difficult for a child care center to make even. We target children living in poverty and the financial support is lacking."
- "As always, money. We are based on state and federal funding, either feast or famine. But, my teachers are providing wonderful training, fabulous curriculum - great benefits, wages."
- "Training time: The cost of providing substitutes for teachers to attend training is cost prohibitive. Likewise to do an all program training, the cost of being closed is limited to county approval."
- "I believe our quality is high and do not feel we have obstacles other than financing."
- "Spending time with staff training, reflecting and planning."
- "Sufficient time for professional development for all classroom staff."

Fully-rated family child care providers reported that the constraint posed by their physical space is the biggest quality improvement challenge.

- "Redoing my physical space."
- "I need more space for children to play. For example, block, dramatic play, art, music, sand and water. I want to display all these activities, but not enough room. I want to do my indoor space used for children. Space is my biggest concern."
- "Physical space, only so much I can do with size of my home…ERS really criticize my supervision because I don't have 1 large open room with sleeping, diapering, and play.
- "More space in my home for child care activities."
- "Need capital dollars - knock out walls and provide more space."
- "The environment can't change the layout of my house to help with supervision in all areas or add ramp downstairs etc."
- "The cost to improve the outside play structure and make sure it is safe. The stuff to put on the ground and the big area to pass the ERS safety is really hard."

Summary of Re-Ratings and Quality Improvement

Programs in Parent Aware are improving their Parent Aware rating level between their first and second rating. The majority of programs (both centers and family child care) improved their star rating from their first to their second rating. At the second rating, no programs received 1-star and the proportion of 4-star programs increased from 10% to 43%. Family child care providers are improving their scores by significantly more points than center-based programs (10.0 compared to 5.5).

Programs that move up a star level are making the biggest gains in the Tracking Learning category, meaning that points earned in Tracking Learning are driving the star level gains made by programs. Programs are also improving their scores on the observational measures of quality. Small but statistically significant improvements were seen in the average ECERS-R, ITERS-R, and FCCERS-R scores from first to second rating. However, these small overall gains in scores on the Environment Rating Scales mask some of the individual movement up (or down) on the scales. Small but significant improvements were seen on the Emotional Support subscale and Classroom Organization subscale of the CLASS, but not on the Instructional Support subscale. The increases on observational measures range from one-third to one-half of a point on a seven-point scale.

As programs make quality improvements, they are receiving supports from up to three kinds of Technical Assistance providers. Supports are designed to help programs improve their rating and their overall quality. All fully-rated programs receive technical assistance from a Provider Resource Specialist and may also receive technical assistance from an ERS Consultant and/or a CLASS Coach (center-based programs only). Provider Resource Specialists report providing, on average, 8.2 hours of direct contact over 3.6 site visits. They report working more intensely (spending more hours) with family child care providers and with ELL providers. Both Provider Resource Specialists and providers report that they spend most of their time together working on the documentation packet and preparing for the ERS observation.

Some programs also receive the support of an ERS Consultant. For those who do receive this support, ERS Consultants report providing on average 13.75 hours of direct contact over 6.4 visits. Like Provider Resource Specialists, they report working more intensely (spending more hours) with family child care providers than with centers. Providers reported that the four activities they most often spent time on with their ERS consultant were: Understanding the ERS scoring system, Rearranging the physical space, Purchasing new materials for learning activities, and Hand washing and other sanitary procedures.

A third support, CLASS coaching, was made available in mid-2010. CLASS coaches reported having served just 13 programs that had received a rating as of June 30, 2011. They report providing on average 23.2 hours of direct contact over 8.8 site visits to these 13 programs. According to surveyed center directors, the activities they most frequently engaged in with their CLASS Coach were: Observing me teach and giving me feedback, Helping me organize my classroom processes to aid children's learning, Helping me understand the CLASS scales, and Helping me understand the CLASS scoring system.

In addition to technical assistance, fully-rated programs who receive fewer than four stars in their rating are eligible for financial assistance in purchasing materials or resources needed to make quality improvements. Fully-rated programs eligible to receive financial support from Parent Aware received on average $2,791 (although family child care providers received significantly more dollars than centers), with the majority of those dollars being spent on materials for the learning environment (such as books, toys, and games).

Most programs are also spending their own financial resources to make improvements to their program. When asked about non-Parent-Aware expenditures, programs reported the highest levels of spending for purchasing supplies and materials for the classroom (as opposed to renovations, teacher training, outdoor equipment, etc.). Family child care providers reported spending nearly $5000 on average on program improvements in the last 12 months while center directors reported spending over $30,000 on average on program improvements in the last 12 months. Center directors report that the most important quality improvement they made over the past 12 months was to improve staff training, professional development, and qualifications. Family child care providers, on the other hand, cite equipment improvements as their most important quality improvement.

While most providers reported that the supports provided by Provider Resource Specialists and ERS Consultants are "very helpful," providers were even more likely to report that free training, free curriculum materials, free assessment materials, and quality improvement supports (financial assistance) were "very helpful." When asked what makes quality improvement challenging, center directors report that lack of money and time are their biggest obstacles to improving their quality; family child care providers cite the constraints posed by their physical space as their biggest obstacle to better quality.

Recommendations

- Continue to support quality improvement while recognizing that the gains programs are making on Parent Aware ratings are not accompanied by proportionate gains on observational measures of quality. This discrepancy indicates a need to continue evaluating the weighting scheme for observational measures in the rating tool and the role they should play in determining the final rating.

- Develop processes for entering data and tracking services provided by the technical assistance staff on a regular basis. The method used for the Evaluation required staff to review records and submit data after they had worked with providers. It would be more accurate to collect these data in real time so that they could be used for regular tracking and performance management.

Section 6. PARENTS AND CHILDREN IN PARENT AWARE-RATED PROGRAMS

Purpose of this Section:

Another central goal of Parent Aware is to support parents as they make early care and education decisions and, ultimately, to promote positive developmental outcomes for children in Parent Aware-rated programs. To assess progress towards these two interrelated outcomes, information is collected for the Evaluation from children attending Parent Aware-rated programs and their parents. In this section of the report, we provide details about recruitment of the sample and background information on the demographic characteristics of the child and family sample. We also describe parents' perceptions of the early care and education setting they use and whether they recognize the name "Parent Aware". Finally, we examine a proxy for parent satisfaction with the setting and the degree to which this satisfaction relates to a program's star level in Parent Aware.

Key Findings:

- Children in Parent Aware rated programs and their parents were recruited into the evaluation in three cohorts: Fall 2008, fall 2009, and fall 2010. Parent Aware rated programs assisted with the recruitment of eligible children (the majority were children in their year prior to starting Kindergarten), with priority given to low-income children. Across the three cohorts, 701 children attending 138 Parent Aware-rated programs participated in the evaluation.
- The child sample was 42% white, 24% African American, 8% Hispanic/Latino and less than 5% each of Hmong (4%), other Asian (4%), Alaska Native or American Indian (2%), and African (1%). Eighty percent of the sample spoke English as their primary language. Other languages included Hmong, Spanish, Somali, and Karen. Sixty-one percent had a household income of less than $50,000 per year, and over one-third (37%) reported receiving some type of scholarship, subsidy, or other assistance for their early care and education expenses.
- Over one-third (34%) of parents had heard of Parent Aware in fall 2010. This was an increase from 20% in the fall of 2008, and 25% in the fall of 2009.
- Parents are highly satisfied with their early care and education programs. Satisfaction does not vary by Parent Aware star rating.
- Overall, the sample of children and parents participating in the evaluation is diverse in terms of several factors including income, race and ethnicity, and education. These child and family characteristics are controlled for in the analyses examining links between program characteristics and child outcomes.

Recruitment of Children and Families

Recruitment of children into the Evaluation occurred in three cohorts, the first in the fall of 2008, the second in the fall of 2009, and the third in the fall of 2010. Parent Aware programs that agreed to participate in the Evaluation were contacted to enroll children to participate in a fall and spring child assessment. Children were eligible if they currently attended a Parent Aware-rated program and would be entering Kindergarten the following fall (i.e. they were in their final year of preschool). In the third year, some 3-year-old children were included in the sample (children who would be entering their pre-kindergarten year the following fall), in order to increase sample sizes, particularly among fully-rated programs. Consent forms for parents as well as a brochure were distributed to all of the programs participating in the Evaluation.

Programs assisted with enrollment of children into the study by inviting parents of eligible children to participate. Up to six children per child care center, Head Start program, or School Readiness program were eligible. Up to two children per family child care home were eligible. Programs were asked to approach families who received a child care subsidy first, then open recruitment up to all families. Programs were also asked to prioritize enrollment of children who were in care at least 20 hours per week and of children still expected to be enrolled in the program the following spring. Programs that did not enroll children receiving a subsidy were given the option of inviting any family to participate in the Evaluation but were still asked to keep the other criteria in mind. It is possible that programs approached families they thought were more likely to participate or those who they felt were functioning at a higher level (though it would be impossible for program staff to know how children would perform on the particular measures used in the Parent Aware Evaluation).

The evaluation followed up with programs on a regular basis to encourage them to return signed consent forms. If a program was having difficulty recruiting children and families, research staff from the Evaluation team talked to parents directly during pick-up hours or during an already scheduled family event coordinated by the program. Children received a book and a sticker for participating in the Evaluation. Child assessments were conducted at two time points for each of the three cohorts: Fall 2008 and spring 2009, fall 2009 and spring 2010, and fall 2010 and spring 2011. Across the three cohorts, 701 children attending 138 Parent Aware-rated programs participated in the evaluation (see Table 34).

Annual program rating data (including scoring on the quality categories and overall star level) were linked to each child for the year in which the child participated in the Evaluation. Programs could have participated in one, two, or three cohorts of data collection. The program rating information would have changed each year, and the updated information would be linked to the children from corresponding year. As described in Section 7 of the report, the analytic strategy for examining children's developmental outcomes by program quality accounts for this "nesting" of multiple children within one program.

Table 34. Total number of child participants by program and rating type across three cohorts of children

Program Type/Rating	4 Star Automatic (n = 66)	4 Star (n = 26)	Pro-visional (n = 2)	3 Stars (n = 31)	2 Stars (n = 12)	1 Star (n = 1)	Total (n = 138)
Head Start/ Early Head Start	53	0	0	0	0	0	53
Child care center/preschool	296	62	21	77	25	3	484
Family child care	4	37	0	14	8	0	63
School Readiness	101	0	0	0	0	0	101
Total Children	**454**	**99**	**21**	**91**	**33**	**3**	**701**

Source: Parent Aware Evaluation Team, Child Trends and Parent Aware Rating Tool Database as of June 30, 2011

As shown in Table 34, the distribution of children in the evaluation is skewed toward higher-rated programs, particularly 4-star automatically-rated programs. It is important to note that this skewed distribution mirrors the distribution of programs participating in Parent Aware. As such, the Evaluation is limited in making comparisons of child outcomes across the full range of star ratings. Comparisons across 1- and 2-star programs (collapsed), 3-star, and 4-star fully-rated programs are presented in Section 7. Follow-up analyses examined child outcomes in 1- and 2-star programs (collapsed), 3- and 4-star programs (collapsed), and automatically-rated 4-star programs.

Child Demographic Information

Across the three cohorts of children in the sample, a total of 701 children provided at least partial data on their development (through direct assessments and teacher report, as described below). The mean age was 4.64 years at the fall assessment and 5.27 years at the spring assessment. Fifty percent of the children were female, 42% were White, and 24% were African American. Eighty percent of families spoke English at home, and 61% reported a household income of less than $50,000 per year. In addition, 37% of families reported receiving some type of scholarship, subsidy, or other assistance for their early care and education expenses. Table 35 provides demographic information for the child sample.

Table 35. Demographic information for the three cohorts of child participants (N = 701)

Age	n	Average Age (in Years)
Fall	675	4.64
Spring	578	5.27
Gender	**n**	**%**
Female	349	50%
Male	341	49%
Missing	11	2%
Race	**n**	**%**
White/Caucasian	296	42%
Black/African American	170	24%
Hmong	29	4%
Asian Other	25	4%
Alaska Native or American Indian	17	2%
Hispanic/Latino	56	8%
African	8	1%
Other	51	7%
Missing	49	7%
Child Language	**n**	**%**
English	559	80%
Hmong	25	4%
Spanish	16	2%
English/Spanish	20	3%
English/Somali	7	1%
Karen	3	< 1%
Other	37	5%
Missing	34	5%
Income	**n**	**%**
< $15,000	127	18%
$15,000 - $20,000	76	11%
$20,000 - $30,000	99	14%
$30,000 - $40,000	85	12%
$40,000 - $50,000	39	6%
$50,000 +	234	33%
Missing	41	6%
Scholarship/Subsidy (CCAP, Pre-K Allowances, other assistance)	**n**	**%**
No	400	57%
Yes	261	37%
Missing	41	6%

Source: Parent Aware Evaluation Parent Interview and Minnesota Early Learning Foundation child database

Family Background Characteristics

Parents of children enrolled in the evaluation were interviewed over the phone in the fall of 2008 (n = 153), the fall of 2009 (n = 186), and the fall of 2010 (n = 245). Wilder Research conducted the interviews which included items regarding parents' child care selection, usage, and satisfaction, their thoughts on quality, perceptions of Parent Aware, and other child care related questions, in addition to family demographic information. The parent most knowledgeable about the child's early care and education experience was asked to complete the interview.

Of the 701 children in the evaluation, 552 had corresponding parent interviews. Questions regarding family activities and other factors from the parent interview provide a picture of the family context for the children in the sample.

Parent health and demographics. The mothers of children in Parent Aware-rated programs were 33.2 years old on average. The fathers were 35.6 years old on average. Twelve percent of parents report being from an immigrant or refugee group. Twenty percent of mothers had a high-school education or less and 47% had at least a Bachelors degree (see Table 36). For fathers, 32% had a high-school education or less and 38% had a Bachelors degree or higher.

Table 36. Parental educational attainment

Highest grade or year of school completed by the mother	n	%
Never attended/Kindergarten only	9	2%
1st-8th grade	4	1%
9th-11th grade	19	3%
12th grade but no diploma	8	1%
High school diploma/equivalent	72	13%
Voc/Tech program	20	4%
Some college but no degree	106	19%
Associates degree	50	9%
Bachelors degree	130	24%
Graduate/Professional school but no degree	21	4%
Master's degree	69	13%
Doctorate degree	27	5%
Professional Degree beyond Bachelor's Degree	13	2%
Total	**548**	**100%**

Highest grade or year of school completed by the child's father	n	%
Never attended/Kindergarten only	8	1%
1st-8th grade	7	1%
9th-11th grade	34	6%
12th grade but no diploma	16	3%
High school diploma/equivalent	110	20%
Voc/Tech program	20	4%
Some college but no degree	76	14%
Associates degree	42	8%
Bachelors degree	118	21%
Graduate/Professional school but no degree	13	2%
Master's degree	40	7%
Doctorate degree	20	4%
Professional Degree beyond Bachelor's Degree	20	4%
Don't know	28	5%
Total	**552**	**100%**

Source: Parent Aware Evaluation Parent Interview

Over half of parents reported being married and living with their spouse, and most reported that they were currently working for pay at a job (see Table 37). Seventy-four percent reported working at least 36 hours per week.

Table 37. Marital and work status of parents of children in Parent Aware-rated programs

Current marital status	n	%
Single, never married	148	27%
Single, living with a partner	56	10%
Married, living with spouse	292	53%
Married, separated	21	4%
Divorced/Widowed	34	6%
Total	**551**	**100%**
Primary activity during "most" of the last week	n	%
Working for pay at a job	406	74%
Holding a job, but not at work	12	2%
Looking for work	24	4%
Going to school	37	7%
In an unpaid job training program	3	< 1%
At home full time	53	10%
Unable to work because of a disability	10	2%
Other	5	1%
Total	**550**	**100%**

Source: Parent Aware Evaluation Parent Interview

The majority of parents of children in Parent Aware-rated programs do not receive benefits such as MFIP (Minnesota Family Investment Program; Minnesota's Temporary Assistance for Needy Families program), public housing, or other forms of assistance. The programs that are used the most are free or reduced price school lunches (29%) and WIC (28%). Twenty-five percent of parents report using subsidies from the Child Care Assistance Program (CCAP) (see Table 38).

Table 38. Parents' use of benefits

Benefits received (n=315)	Yes	No	Don't know/ Refused
MFIP (Minnesota Family Investment Program)	13%	87%	0%
Medicaid or Medicare	19%	80%	1%
Food Stamps	24%	75%	0%
WIC	28%	72%	0%
Free or reduced price school lunches for your children	29%	70%	1%
Public Housing	7%	93%	0%
Section 8 Housing Voucher	7%	93%	0%
Social Security payments	3%	97%	0%
Disability (SSI) for yourself	2%	98%	0%
Disability (SSI) for other family member	5%	95%	0%
Child care assistance or CCAP	25%	75%	0%
Unemployment insurance	5%	94%	1%
Other forms of assistance	6%	93%	1%

Source: Parent Aware Evaluation Parent Interview

Early care and education usage. Parents were asked which types of early care and education they had used in each of the prior two weeks. The most common answer was center-based care, which includes child care centers, nursery schools, preschools or School Readiness programs (see Table 39). Children spent on average about 34 hours per week in center based care, while children in a licensed family child care setting spent an average of 33 hours in care. Children spent less time in care in other types of settings such as Head Start (19 hours), care by a grandparent (11 hours), care by a sibling (6 hours), care by a different relative (10 hours), and care by a non-relative (11 hours).

Table 39. Types of early care and education arrangement used in past two weeks

Program	Number of Parents Reporting	Percent	Mean Hours/Week
Child care center, nursery school, preschool or School Readiness program	442	80%	34
Licensed Family Child Care (FCC)	127	23%	33
Head Start	75	14%	19
Care by Grandparent	163	30%	11
Care by Sibling	21	4%	6
Care by Other Relative	67	12%	10
Care by Non-relative	56	10%	11

Source: Parent Aware Evaluation Parent Interview

Early care and education selection. Parents were asked how they first learned about the program they selected for their child. The majority of parents reported that they learned of their child care program through word of mouth. Thirty-four percent of respondents reported that either a friend, coworker, neighbor, or relative first told them about their child care program. Less frequent responses included hearing about the program from their employer (8%) or from printed materials (8%). One parent indicated learning about their child's program from Parent Aware (see Table 40).

Table 40. Parent responses to "How did you first learn about the program?"

Source	Number	Percent
Friend, coworker, neighbor	125	23%
Relative	58	11%
Workplace, employer	45	8%
Newspaper, ad, yellow pages	35	6%
Public or private school	32	6%
Program provides care for another child	27	5%
Internet	24	4%
Church, synagogue, or other place of worship	14	3%
Home visitor, parent mentor, social worker	11	2%
Child Care Resource & Referral Network	8	1%
Health care provider	4	< 1%
Parent educator	2	< 1%
Parent Aware	1	< 1%
Other	143	26%

Source: Parent Aware Evaluation Parent Interview

Parents were also asked about the primary reason for selecting the program they chose. The most common response was that parents believed that the program was a high quality program (28%). The second most common reason for choosing their child care program was that it was located close to their home (15%). The remaining parents indicated other reasons of convenience for choosing their child care arrangement [e.g. affordable cost (3%), only option

(2%), caregiver speaks the family's native language (< 1%), Parent Aware rating was high (<1%), child has special needs (<1%)]. Table 41 provides details on the reasons parents report.

Table 41. Primary reason for choosing child care program

Reason	Number	Percent
Heard (or thought) it was high quality	152	28%
Close to home	81	15%
Affordable cost	16	3%
Matched work schedule	16	3%
Only option for my schedule (due to cost, transportation, schedule)	9	2%
Parent mentor told me to take my child	2	< 1%
Parent Aware rating was high	7	< 1%
Caregiver speaks my native language	4	< 1%
My child has special needs	2	< 1%
Other	240	43%

Source: Parent Aware Evaluation Parent Interview

Knowledge of Parent Aware. Parents were asked if they had heard of Parent Aware. During the fall of 2008, twenty percent of parents interviewed reported that they had heard of the quality rating system. A different cohort of parents was interviewed in the fall of 2009; 25% of these parents had heard of Parent Aware. In the third cohort of parents interviewed in the fall of 2010, 34% of parents had heard of Parent Aware. Thus, there has been a slow but steady increase each year in the proportion of parents of children who are enrolled in Parent Aware rated programs who had heard of Parent Aware at the time of the parent interview (see Table 42).

Table 42. Responses to "Have you heard of Parent Aware?"

Have you heard of Parent Aware? Parents Interviewed fall 2008	Number	Percent
Yes	31	20%
No	120	78%
Don't Know	1	<1%
Have you heard of Parent Aware? Parents Interviewed fall 2009	**Number**	**Percent**
Yes	46	25%
No	138	74%
Don't Know	2	1%
Have you heard of Parent Aware? Parents Interviewed fall 2010	**Number**	**Percent**
Yes	84	34%
No	160	65%
Don't Know	1	< 1%

Source: Parent Aware Evaluation Parent Interview

Summary of family characteristics and knowledge of Parent Aware. Parents of children enrolled in Parent Aware programs tend to be working (74%), married or partnered (63%), and not using public assistance, though over 60% have incomes below $50,000 per year. Most use some center-based care (80%), and although over a quarter of families (28%) report choosing their early care and education program because it was high quality, few (< 1%) reporting choosing the program based on the Parent Aware rating. Parent recognition of the name "Parent Aware" has grown each year of the pilot.

Parent Perceptions of Care

The parent interview collected information about parents' perceptions of early care and education in two ways. First, to understand to what extent parents value certain aspects of an early care and education setting, parents were asked how important is it that their program do or provide particular quality features, such as providing a warm and caring environment or assessing their child's learning and development. In response to these questions, parents report a strong value of the emotional aspects of a program, including providing a warm and caring environment, helping children get along with others, and having staff that are warm and friendly. At least 90% of parents rated these emotional components of the program as "extremely important." Parents also reported that they valued educational aspects of the program including that the program have a lot of books and learning materials, that the program use a curriculum, and that teachers have a formal education background. Parents report a slightly higher value on the emotional component of the arrangement, though both components are rated by parents as important (see Table 43).

Table 43. Responses to: "Child care programs, teachers, and caregivers do many things when they care for children. How important is it that they…"

	Extremely important	Somewhat important	Not very important	Not at all important
Talk with you each day	59%	36%	4%	1%
Use a curriculum or planning tool for teaching	73%	26%	1%	0%
Have a lot of books and learning materials.	90%	10%	0%	0%
Provide a warm and caring environment with positive relationships between teachers and caregivers and children	98%	2%	0%	0%
Help your child get along with other children	92%	8%	0%	0%
Track your child's learning and development using an assessment tool	61%	36%	3%	< 1%
Have teachers and caregivers with formal education and training to work with young children	78%	21%	1%	<1%
Have staff that are warm and friendly with your child	95%	4%	< 1%	0%
Enroll children from different backgrounds (for example, race, ethnicity and religion)	61%	33%	4%	2%
Have caregivers or teachers who speak your family's native language with your child	59%	29%	8%	3%

Source: Parent Aware Evaluation Parent Interview

Second, parents were asked about their perceptions of how often particular quality features are present at their child's early care and education setting. These features, such as having a lot of books and a caring environment, are the same features parents rated on perceived importance to quality in Table 43. Nearly all parents report that each quality feature is present "usually" or "always" in their child's early care and education setting. Parents are most likely to

believe that their child's program "always" has a lot of books and learning materials (90%), a warm and caring environment (88%), and have warm and friendly staff (87%). The emotional components that parents believe are "extremely important" to quality are perceived as "always" present by more than 80% of parents (see Table 44). Similarly, educational aspects are believed to be "always" present by at least 70% of parents.

Table 44. Responses to: "Thinking about [program name] that [child] attends, how often would you say [program name] does each of these things…"

	Never	Rarely	Sometimes	Usually	Always
Talk with you each day	<1%	3%	10%	27%	60%
Use a curriculum or planning tool for teaching	<1%	<1%	7%	16%	75%
Have a lot of books and learning materials.	<1%	<1%	2%	6%	90%
Provide a warm and caring environment with positive relationships between teachers and caregivers and children	<1%	<1%	2%	8%	88%
Help your child get along with other children	<1%	<1%	3%	13%	83%
Track your child's learning and development using an assessment tool	2%	2%	9%	17%	68%
Have teachers and caregivers with formal education and training to work with young children	<1%	<1%	5%	20%	70%
Have staff that are warm and friendly with your child	<1%	<1%	1%	11%	87%
Enroll children from different backgrounds (for example, race, ethnicity and religion)	1%	3%	10%	14%	70%
Have caregivers or teachers who speak your family's native language with your child	8%	1%	4%	6%	81%

Source: Parent Aware Evaluation Parent Interview

Parent Satisfaction. Because parents rate the same set of features on both importance to quality and perceived frequency of occurrence in child care, a proxy measure for satisfaction with care could be developed. A satisfaction score was calculated for each feature by subtracting its reported frequency of occurrence from its perceived importance, with lower scores (indicating greater satisfaction (possible scores range from 0 – 3). That is, if parents rate both importance and frequency at the same level, their satisfaction score would equal zero. Anything higher than zero is an indication of a discrepancy between the two indices (or "dissatisfaction", for the purposes of this analysis). To create this satisfaction measure, the scale for importance was reversed and the frequency measure was collapsed from five to four levels so that both measures

were on 4-point, ascending scales. Parents' satisfaction with their early care and education arrangement was then compared across parents in 1- and 2-star programs (collapsed), 3-star, 4-star fully rated, and 4-star automatic programs. Means are presented in Table 45. Scores were very low for all star levels, indicating little discrepancy between parents' ratings of importance and frequency of quality factors.

Table 45. Mean Satisfaction Scores by Star Rating.

	Mean Level of Satisfaction (lower scores indicate higher satisfaction)
1- & 2- Stars Fully Rated (n = 30)	0.229
3-Stars Fully Rated (n = 83)	0.253
4-Stars Fully Rated (n = 94)	0.172
4-Stars Automatically Rated (n = 407)	0.190

Parent Aware Evaluation Parent Interview

A one-way ANOVA revealed no significant differences in mean level of satisfaction with care across the star levels [$F(3, 564) = 1.3$, $p = > .05$]. Little variation in either perceived importance or frequency (see Tables 43 and 44), and disproportionately greater representation of higher-rated programs within the evaluation, limits comparison of satisfaction across program rating. Overall, parents appear to be satisfied with their experiences in early care and education programs. Future work to understand parent perceptions and level of satisfaction is needed.

Summary of Parent and Child Characteristics

Children in Parent Aware rated programs and their parents were recruited into the evaluation in three cohorts: Fall 2008, fall 2009, and fall 2010. Parent Aware rated programs assisted with the recruitment of eligible children (the majority were children in their year prior to starting Kindergarten), with priority given to low-income children. Across the three cohorts, 701 children attending 138 Parent Aware-rated programs participated in the evaluation. The average age of children was 4.64 years at fall assessment and 5.27 years at spring assessment. Half of the children were female. The sample was diverse with respect to race, culture, language and income.

Parents of children enrolled in the evaluation were interviewed over the phone in the fall of 2008 (n = 153), the fall of 2009 (n = 186), and the fall of 2010 (n = 245). Wilder Research conducted the interviews which included items regarding parents' child care selection, usage, and satisfaction, their thoughts on quality, perceptions of Parent Aware, and other child care related questions, in addition to family demographic information. Of the 701 children in the evaluation, 552 had corresponding parent interview.

Mothers were 33.2 years of age on average, fathers were 35.6 years old. Twelve percent of parents reported that they were from an immigrant or refugee group. One-fifth of mothers had a high-school education or less and nearly 50% had at least a Bachelors degree. For fathers, 32% had a high-school education or less and 38% had a Bachelors degree or higher.

Just over half (53%) of the parents were married and living with their spouse. The majority of parents (74%) of parents worked at least 36 hours per week. Just under 30% of parents reported receiving free or reduced school lunches for their children, 28% received WIC, and 25% used subsidies from the Child Care Assistance Program (CCAP).

Looking across all of the types of early care and education arrangements used at least once in the past two weeks, 80% used center-based care for their children, 23% used family child care, 14% were in Head Start, 46% used relative care, and 10% used non-relative care. Parents most often learned about their child's early care and education program through word of mouth. They most often chose the program because they thought it was high quality (28%) or because it was close to home (15%). Less than 1% reported choosing their program based on the Parent Aware rating.

Over one-third (34%) of parents had heard of Parent Aware in fall 2010. This was an increase from 20% in the fall of 2008, and 25% in the fall of 2009. Parents are highly satisfied with their early care and education programs and satisfaction does not vary by Parent Aware star rating.

Overall, the sample of children and parents participating in the evaluation is diverse in terms of several factors including income, race and ethnicity, and education. These child and family characteristics are controlled for in the analyses examining links between program characteristics and child outcomes.

Recommendations

- Continue to prioritize marketing and outreach efforts that intentionally target families with young children and are designed to support their decision-making.

- Continue to prioritize data collection from children with diverse characteristics. If feasible, include systematic data collection from children as part of the program requirements for enrolling in Parent Aware to ensure a more representative sample of children in the Evaluation.

Section 7: VALIDATION OF THE PARENT AWARE RATING TOOL

Purpose of this Section:

Validation of a Quality Rating and Improvement System is an examination of how well the rating process captures meaningful differences in program quality. For example, ***is a 4-star program providing care and education that is different than a 1-star program and that is linked in different ways to the outcomes that are desired***? In the Parent Aware Evaluation, two approaches are used for validation. The first is to analyze whether differences can be observed in the environments or teacher-child interactions in programs at different quality levels. Because these dimensions are included in the Parent Aware Rating Tool, it is expected that better scores on observational measures will be observed at higher quality levels. The second approach to validation used in the Parent Aware Evaluation is to examine whether the measures of program quality and the rating levels designated by Parent Aware are related in expected ways to gains in children's development. If Parent Aware is successfully distinguishing meaningful levels of quality, it is reasonable to expect that children's outcomes would improve as star levels increase. These analyses must be conducted carefully to control for the multiple factors beyond program quality that are associated with children's outcomes.

Key Findings:

- Average observed quality scores were largely in the "minimal quality" range (scores between 3 and 5) on measures of global quality (the Environment Rating Scales). Average scores on the measures of teacher-child interaction were in the "mid" range (scores between 3 and 5 on the CLASS Emotional Support and Classroom Organization) or "low" range (1-2 on the CLASS Instructional Support). These lower scores were noted even among programs with higher Parent Aware ratings, indicating a need to focus on quality improvement across the rating spectrum.
- There was limited evidence of observed quality scores increasing in predicted ways across 2-, 3-, and 4-star fully-rated programs. Four-star programs scored significantly higher than some (but not all) star levels on measures of observed global quality in preschool classrooms and family child care programs. Predicted differences across star levels were not supported by the data for observed global quality in infant-toddler classrooms, observed math and literacy practices, or observed measures of teacher-child interaction quality in preschool classrooms.
- Looking across the developmental measures on which children were assessed, significant positive gains were made from fall to spring on measures assessing receptive and expressive language, pre-literacy skills, pre-math concepts, social competence and approaches to learning. Increased behavior problems were also noted across children. The magnitude of positive gains was larger for children from low-income families.
- Children in programs at different quality rating levels or with different scores on observed quality measures or Parent Aware quality categories did not differ systematically from each other in their developmental gains from fall to spring.

[17]One goal of Quality Rating and Improvement Systems is to rate child care and early education programs in a way that is fair, accurate, and predictive of the actual quality of care and education that children receive. This issue is at the core of QRIS validation where the central question is about the extent to which the rating process captures meaningful and important differences in program quality. From the beginning of the pilot, Parent Aware stakeholders have expressed an interest in knowing how well the Parent Aware Rating Tool is distinguishing meaningful differences in quality. For example, is a 4-star program providing care and education that is different than a 1-star program and that is linked in different ways to the outcomes that are desired?

To date, nationally, QRIS evaluators have not come to consensus on the best approach for establishing the validity of QRIS. Because validation of QRIS is a specific requirement for receipt of federal Race to the Top Early Learning Challenge funds, it is certain that issues related to validation will be discussed among researchers and policymakers at both state and federal levels in the coming years. These conversations will provide needed guidance and recommendations on strategies for QRIS validation. Currently, there are a number of approaches to validation that can be considered, and each has challenges and benefits (see Lugo-Gill et al., 2011). A comprehensive approach to validation is needed that uses multiple strategies over time.

One approach to validation is to examine the indicators used in the QRIS and to consider whether these items reflect best practices in the field. This approach assesses whether the tool contains the accepted components of quality, as defined by the research literature and compilations of best practices (for example, accreditation standards). This process was used early in the pilot of Parent Aware when the indicators in each of the four quality categories were selected using the best research evidence available in the field at the time. The cross-agency QRIS work group also engaged in this strategy when they received legislative direction to make recommendations for a common set of program standards and indicators (Minnesota Department of Human Services and Minnesota Department of Education). These recommendations were put forth for public input and were revised to account for stakeholder feedback as appropriate. The challenge of relying solely on validation by experts is that it does not address the question of whether the tool accurately or reliably measures these aspects of quality or that the measures are linked to the desired outcomes for children. Instead, it provides assurance that the constructs selected for inclusion represent important dimensions of quality prioritized by Parent Aware developers and stakeholders and shown to have a strong basis in the research literature.

A second approach to validation is to use observational measures of global quality and interactions of teachers and children (for example, the Environment Rating Scales and the CLASS) to test the extent to which these measures of observed quality are correlated with the dimensions of quality rated using the Parent Aware Rating Tool. Predictive validity would be established if there was clear evidence that high scores or ratings on the Parent Aware Rating Tool are linked to high scores on the observational measures of quality. There are a couple of challenges to using this method of establishing validity. First, as is the case with Parent Aware, the measures of observed quality are often part of the rating process used in QRIS, so there are issues related to using the measures as both independent and dependent variables. Second, this

[17] Portions of the introduction to this section are repeated from the Year 3 Evaluation Report.

method assumes that the observational measures capture the full depth and breadth of quality that matters for children's outcomes. Yet QRIS include additional indicators of quality to supplement those in the ERS (or the CLASS), so using ERS and CLASS as a measure of the desired outcomes underestimates the range and content of practices that are being examined in QRIS.

A third approach to validation is to measure the correlation between measures of children's developmental gains and quality as measured by the QRIS. This approach is based on a strong body of empirical findings that high quality programs are associated with better outcomes for children than lower quality programs, when other factors are controlled. If correlations are found between quality as measured in the QRIS and children's progress, we can have greater confidence that the strategy used to measure and rate quality in the QRIS is working as expected. The drawback to this approach is that it is impossible to control for all the other factors which affect both entry into settings of different quality levels as well as children's developmental outcomes. There are also gaps in our understanding of the dosage or threshold of quality a child needs to experience before improved outcomes can be expected (Zaslow, et al., 2010).

Validation of the Parent Aware Rating Tool includes an additional challenge because the majority of Parent Aware-rated programs are automatically-rated at a 4-star due to their status as accredited, Head Start/Early Head Start or School Readiness programs. Therefore, the Evaluation team did not have access to data that was completely comparable across the fully-rated and automatically-rated programs. In the Year 3 Report, we noted that attempts to develop "proxy" measures of quality that could be compared across program types were not successful.

Similar to analyses conducted in the Year 3 Evaluation Report, in the section that follows, we take the second approach to validation and examine the extent to which scores on measures of observed quality correspond with star ratings. We also use the third approach to validation and examine the extent to which children's gains from fall to spring on a variety of developmental measures are related to Parent Aware ratings.

Before proceeding with the analyses, it must be noted that there are limitations in using the sample of Parent Aware programs to draw definitive conclusions about the Rating Tool. First, the programs that received a full rating in Parent Aware are unequally distributed across star levels, with the majority of programs receiving higher star ratings. For example, sample sizes at each of the star levels are quite small.[18] Samples at the 1-star and 2-star level are combined to create a larger sample size. In addition, the program sample represents early responders to the QRIS and a disproportionately large number of accredited center-based programs which may bias the sample in various ways. For example, these programs may have been encouraged by the incentives that were available to parents selecting programs at 3- and 4-star levels in the first two years of the pilot. Or, they may be programs with access to external supports that have allowed them to complete the accreditation process. Unexpectedly, as will be shown later in this section, all Parent Aware-rated programs (with automatic and full ratings) tended to score in the low to middle ranges on measures of global quality and teacher-child

[18] The Evaluation team set a goal with the Parent Aware Implementation Team of having at least 50 programs in each rating category to support the validation analyses. These recruitment and enrollment goals were not met for a variety of reasons (see the Year 1 and Year 2 Evaluation Reports for further details about recruitment).

interactions which may limit the ability to note significant linkages between quality level and gains in children's developmental outcomes.

Thus, we use caution when attempting to discern patterns between the Parent Aware ratings in this sample and their linkages to observed quality and children's developmental gains. Our conservative, overall strategy in these sections is to rely on the body of research in large, national samples demonstrating the linkages between observational measures of quality and other quality indicators (including those that are rated in Parent Aware) and children's developmental outcomes. When linkages are noted that are consistent with the literature, we interpret these findings as providing positive support for the measurement strategy used in Parent Aware. When findings contradict the existing empirical literature, we interpret them as indicating that further work is needed on the measurement strategy to either a) measure the indicators more accurately, or b) revise the indicators and measures to capture the features of the domain that are most important for observed quality and child outcomes. We also assume that contradictions may be due to the limitations and selection biases of the sample.

Observational Measures of Global Quality and Teacher-Child Interaction: Are they linked with Parent Aware Ratings?

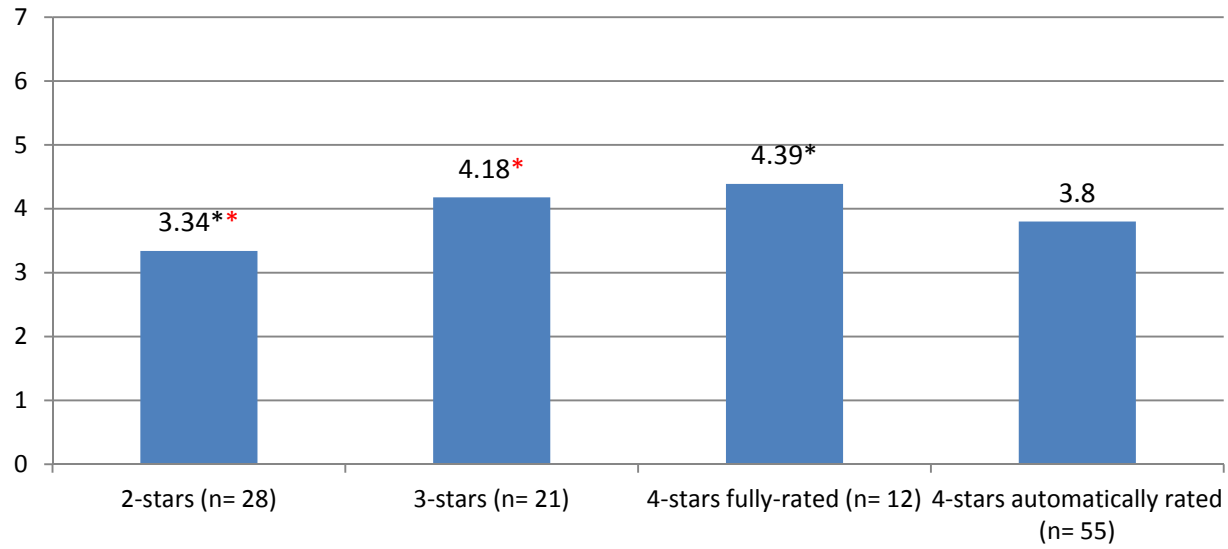
As described in the Year 3 Evaluation Report, Parent Aware uses the Environment Rating Scales (ERS) and Classroom Assessment Scoring System (CLASS) as two of the indicators making up the Teaching Materials and Strategies rating category. As such, all fully-rated Parent Aware programs receive a set of observations: ECERS-R, ITERS-R, and CLASS for center-based programs, and FCCERS-R for family child care programs.

The Evaluation has conducted additional observational measures in automatically-rated Parent Aware programs (accredited programs, Head Start, and School Readiness), following the same protocol used by Parent Aware for fully-rated programs. In addition, the Evaluation has conducted the Early Childhood Environment Rating Scale – Extension (ECERS-E), in Parent Aware programs (both automatically- and fully-rated programs) which assesses instructional interactions related to math, literacy and individual learning needs. In this section, analyses of the relation between observational scores and Parent Aware star ratings are presented. These analyses differ in an important way from similar analyses presented in the Year 3 Evaluation Report. Due to small sample sizes, the Year 3 Report analyses were based on *all* available ratings (both initial and re-ratings), and thus included multiple scores from the same early care and education programs. The analyses presented here are based only on *initial* ratings for programs, so that each program is represented by only one set of scores.

Early Childhood Environment Rating Scale – Revised (ECERS-R). The ECERS-R was conducted in one-third of the preschool classrooms in all fully-rated center-based Parent Aware programs **and** in all center-based automatically-rated Parent Aware programs (accredited, Head Start, and School Readiness programs) that participated in the evaluation. The analyses in this section include observation scores for initial ratings issued before June 30, 2011. When analyzed by star rating, results are only presented for groups that contain at least five programs.

The mean total ECERS-R score across all initial ratings of center-based programs (n=120) was 3.82. Mean total ECERS-R scores by Parent Aware star rating are displayed in Figure 14. The scores for all star rating levels are in the minimal quality range (a score of 3 reflects minimal quality and a score of 5 is good quality according to the authors of the scale). Using a one-way analysis of variance (ANOVA; a statistical method for comparing average scores), there were statistically significant differences in mean ECERS-R scores across the star levels [$F(4, 115) = 6.15$, $p < .001$]. Post hoc analyses indicated that both 4-star fully-rated programs and 3-star programs scored significantly higher than 2-star programs but not significantly higher than 4-star automatically-rated programs.

Figure 14. Mean total ECERS-R score at initial rating by star level and rating type



Source: Center for Early Education and Development (CEED), University of Minnesota as of June 30, 2011
Note: Asterisks of the same color indicate significant differences between the two groups

Sample sizes are small, particularly for 1-star programs (n=4) which could not be included in Figure 14. However, there is moderate evidence indicating a linear trend of increasing scores across fully-rated programs. The scores received by fully-rated programs do not differ in a statistically significant way from the scores received by automatically-rated programs.

Early Childhood Environment Rating Scale – Extension (ECERS-E). The Early Childhood Environment Rating Scale – Extension (ECERS-E) is an observational tool designed to supplement the ECERS-R. It consists of four subscales: Literacy, mathematics, science, and diversity[19] (Sylva, Siraj-Blatchford, & Taggart, 2006). Like the ECERS-R, the ECERS-E is based on a scale of 1 to 7, with 1 indicating adequate quality, 3 indicating minimal quality, 5 indicating good quality, and 7 indicating excellent quality, as designated by the authors of the tool.

[19] The Diversity sub-scale includes 3 items: planning for individual learning needs, gender equality and awareness, & race equality and awareness

Through the Evaluation, Parent Aware programs were observed with the literacy and mathematics subscales, as well as one item from the diversity subscale (planning for individual learning needs) of the ECERS-E, during the observation visit. The ECERS-E was used to collect more in-depth information about literacy, mathematics, and diversity than could be provided by the ECERS-R alone. ECERS-E scores also provided an additional measure of quality that is not embedded in the Parent Aware star ratings (as the other ERS scales and the CLASS are).

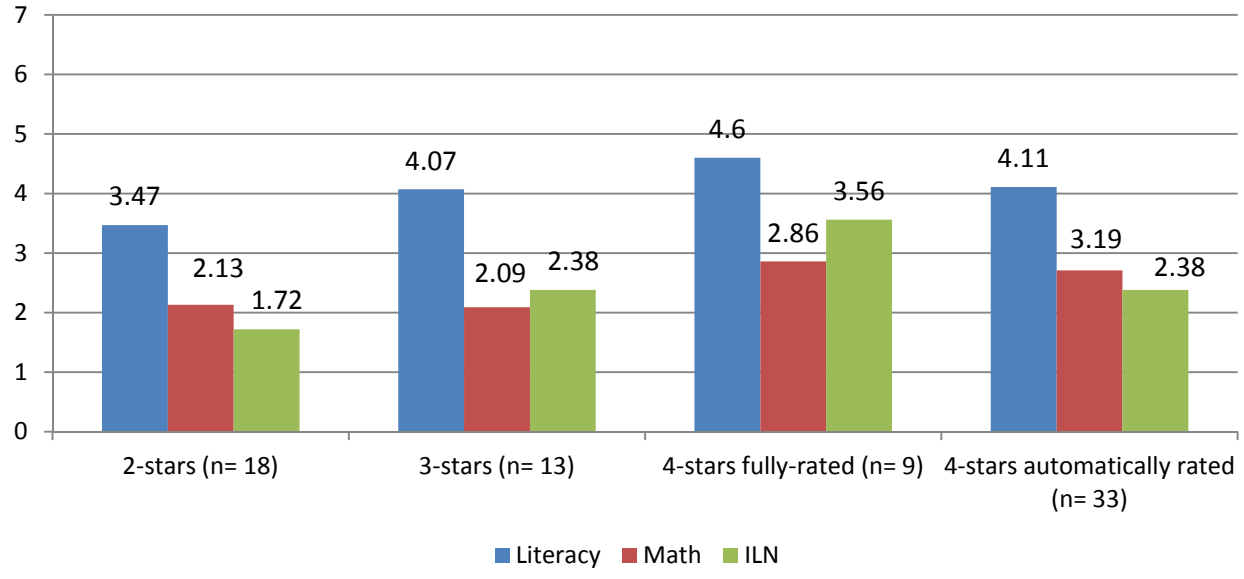
Mean total ECERS-E scores by subscale and Parent Aware star rating are displayed in Table 46 and Figure 15. One-way ANOVAs with post hoc analyses showed that there were no statistically significant differences in Math, Literacy or Individual Learning Needs scores across programs at different rating levels.

Table 46. Mean ECERS-E scores by subscale and star rating.

Star Level/ Rating Type	Literacy Subscale M(SD)	Math Subscale M(SD)	Individual Learning Needs M(SD)
2-stars (n = 23)	3.47 (1.09)	2.13 (0.72)	1.72 (1.45)
3-stars (n = 28)	4.07 (1.22)	2.09 (1.00)	2.38 (1.72)
4-stars fully-rated (n = 23)	4.60 (0.99)	2.86 (0.76)	3.56 (2.30)
4-stars automatically-rated (n = 33)	4.11 (1.03)	2.71 (1.04)	2.38 (1.80)

Source: Center for Early Education and Development (CEED), University of Minnesota as of June, 2011

Figure 15. Mean ECERS-E scores by subscale and star rating.



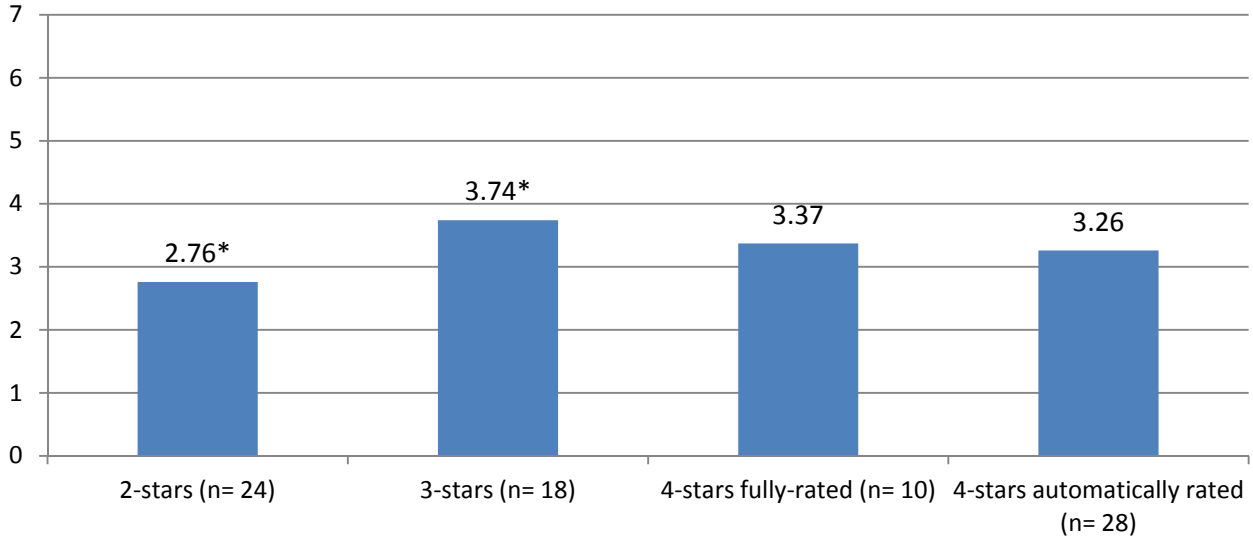
Source: Center for Early Education and Development (CEED), University of Minnesota as June, 2011

Infant/Toddler Environment Rating Scale – Revised (ITERS-R). The ITERS-R was conducted in one-third of the infant/toddler classrooms in all fully-rated center-based Parent Aware programs and in some center-based automatically-rated Parent Aware programs

(accredited, Head Start, and School Readiness programs) that participated in the Evaluation. The analyses in this section include observation scores for programs that had received a Parent Aware initial rating on or before June 30, 2011. When analyzed by star rating, results are only presented for star categories with at least five programs.

The mean total ITERS-R score across all initial ratings (n = 83) was 3.21. Mean total ITERS-R scores by Parent Aware star rating are displayed in Figure 16. The scores for all star rating levels are at or below the minimal quality range (a score of 3 reflects minimal quality and a score of 5 reflects good quality according to the authors of the scale). A one-way ANOVA with post hoc analyses showed that there were statistically significant differences in mean ITERS-R scores across the star levels [$F(4, 78) = 4.31$, $P < .01$] with 3-star programs scoring significantly higher scores than 2-star programs.

Figure 16. Mean total ITERS-R score by star rating and rating type.

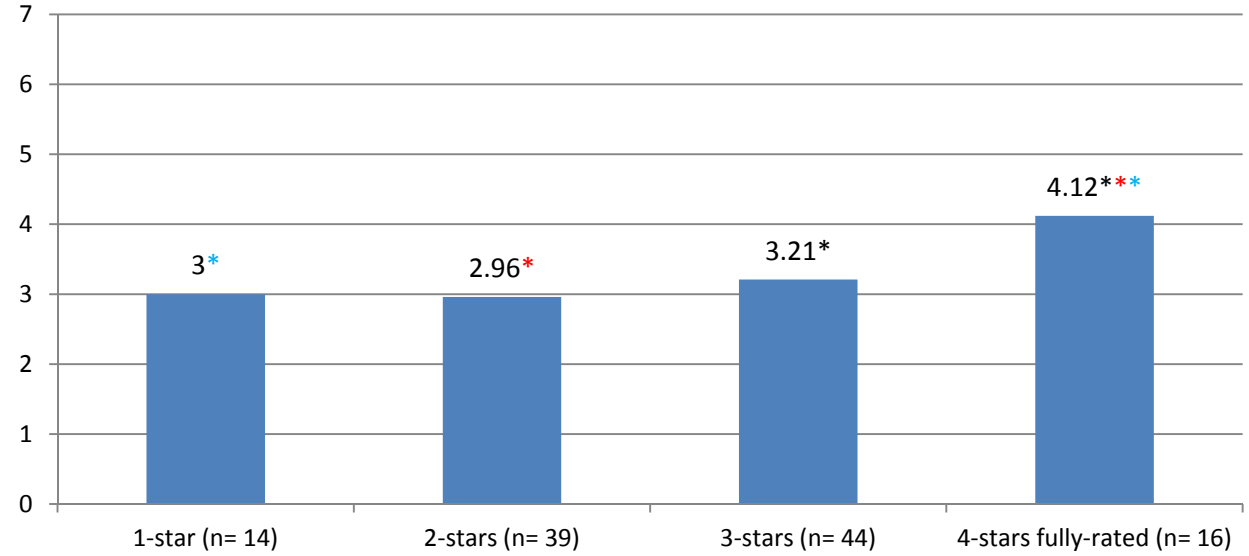


Source: Center for Early Education and Development (CEED), University of Minnesota as of June 30, 2011.
Note: Asterisks indicate significant differences between the groups

Family Child Care Environment Rating Scale – Revised (FCCERS-R). The FCCERS-R was conducted in all fully-rated family child care programs in Parent Aware.

For family child care programs, the mean total FCCERS-R score for all ratings received by June 30, 2011 (n = 114), was 3.22. The FCCERS-R ranged from just below "minimal" to within the "minimal" quality range (see Figure 17). One-way ANOVAs with post hoc comparisons were run for each star level. There were statistically significant differences in mean FCCERS-R scores across the star levels [$F(4, 109) = 8.33$, $p < .0001$] with 4-star fully-rated programs scoring significantly higher than 3-star, 2-star, and 1-star programs.

Figure 17. Mean total FCCERS-R score by star rating and rating type.



Source: Center for Early Education and Development (CEED), University of Minnesota as of June 30, 2011
Note: Asterisks of the same color indicate significant differences between the groups

As can be seen in Figure 17, observed global quality in family child care programs is similar in 1-, 2-, and 3-star programs, while 4-star fully-rated programs score significantly higher than the other star levels on this measure.

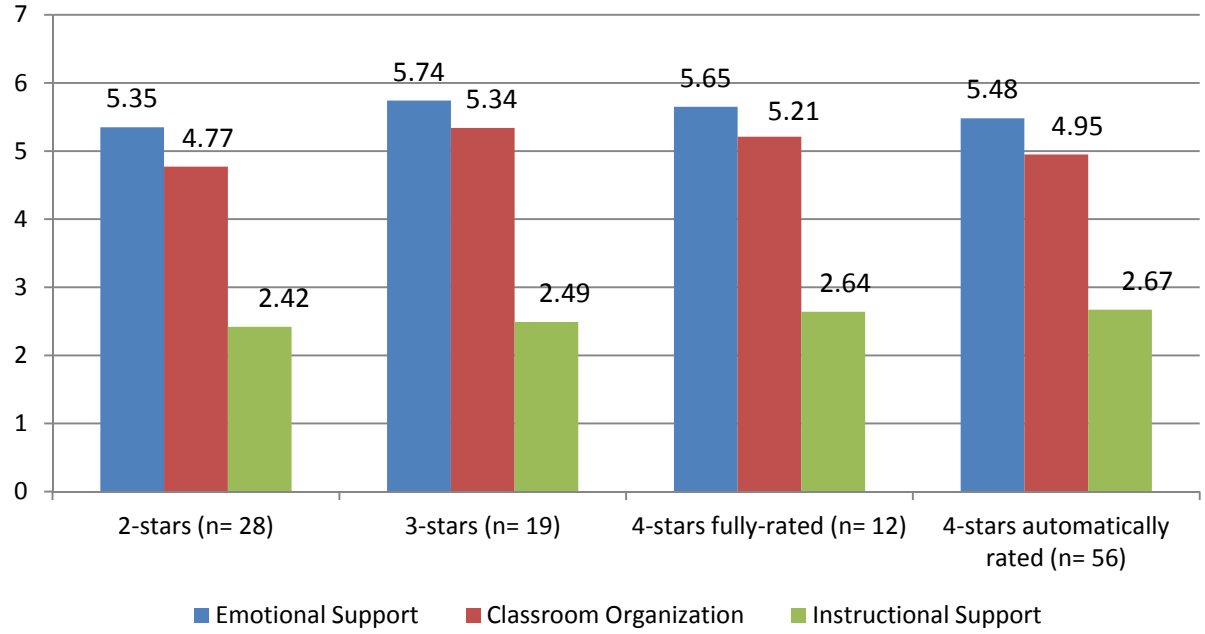
Classroom Assessment Scoring System (CLASS). The Classroom Assessment and Scoring System (CLASS; Pianta, La Paro & Hamre, 2008) is an observational tool used to assess the quality of emotional support and instruction in preschool classrooms. Scores are given for three domains: Emotional Support (includes constructs such as the emotional connection between teachers and students, expressed negativity such as anger or hostility, and teacher sensitivity to students' concerns), Classroom Organization (includes behavior management, productivity, and instructional learning formats), and Instructional Support (includes concept development, how teachers provide feedback, and language modeling). Scores for each domain are based on a scale of 1 to 7, with 1 and 2 indicating a "low range", 3 to 5 indicating a "middle range", and 6 to 7 indicating a "high range", as designated by the authors of the tool.

The CLASS was conducted in one-third of the preschool classrooms in all fully-rated center-based Parent Aware programs and in all center-based automatically-rated Parent Aware programs (accredited, Head Start, and School Readiness programs) that participated in the Evaluation. The analyses in this section include observation scores for programs that had received an initial Parent Aware rating on or before June 30, 2011. When analyzed by star rating, results are only presented for star categories with at least five programs.

The mean CLASS scores for all initial ratings received by June 30, 2011 (n = 119), were as follows: Emotional support M = 5.52, Classroom Organization M = 5.01, and Instructional Support M = 2.57. Mean CLASS scores by star rating and program type are displayed in Figure 18. All star levels had the same pattern of CLASS scores, scoring the highest in Emotional Support, scoring slightly lower in Classroom Organization, and significantly lower in

Instructional Support. One-way ANOVAs with post hoc comparisons were run for each subscale. There were no statistically significant differences across star level for any of the subscales.

Figure 18. Mean CLASS scores by star rating and program type.



Source: Center for Early Education and Development (CEED), University of Minnesota as of June 30, 2011

Summary of linkages between star level and measures of observed global quality and teacher-child interaction. The average scores on the Environment Rating Scales (for ECERS-R, ITERS-R, and FCCERS-R) were in the "minimal quality" range (scores between 3 and 5) and some mean scores were in the "inadequate quality" range (scores between 1 and 3). No overall mean ERS scores for any group reached the "good quality" level (a score of 5 as defined by the scale authors). All mean CLASS scores were in the "low" or "mid" ranges. Mean scores for Emotional Support and Classroom Organization were in the "mid" range (scores of 3 – 5) and mean scores for Instructional Support were in the "low" range (scores of 1 – 2).

There was limited evidence of a linear trend with scores increasing across 2-star, 3-star, and 4-star fully-rated programs. On a measure of global quality in preschool classrooms (ECERS-R), scores for the 3- and 4-star fully-rated programs were significantly higher than those in 2-star programs. In many cases, the scores across star levels were relatively flat. This was particularly true for FCCERS 1-, 2-, and 3-star programs, although 4-star programs scored significantly higher than the other three groups. Predicted differences across levels were not supported by the data for the ITERS-R, ECERS-E, or any of the CLASS subscales.

Thus, there is limited evidence in these findings to support the validity of the Parent Aware Rating Tool at the higher end of the scale. That is, there were only some instances where programs at the 4-star level, programs tended to score better on observed quality measures than programs at other levels. It is critical to point out that there were too few programs at a 1-star

level to include them in these analyses, which significantly constrains the ability to make definitive statements about the tool overall.

Examination of Children's Developmental Gains and Parent Aware Ratings

The child assessment battery used by the MELF Research Consortium consists of a set of direct child assessments as well as two teacher-report assessments. Together, the measures provide a comprehensive look at central domains of school readiness including expressive and receptive language, early literacy skills, early math skills, social and emotional development, and approaches to learning. Table 47 provides children's average scores and standard deviations on all child assessment measures for fall and spring (combined across three cohorts), by income group ("low income" indicates a household income of less than $50,000, "high income" indicates a household income of $50,000 or higher).

Direct child assessment measures. Children's receptive language was measured by the Peabody Picture Vocabulary Test-4th Edition (PPVT-4) (Dunn & Dunn, 2007). The PPVT-4 is a standardized measure, taking age into account, with mean score of 100 and a standard deviation of 15. For example, a child scoring 100 represents exactly average performance for their age. Children's expressive language was measured by the Individual Growth and Development Indicators – Picture Naming (IGDI). This task measures how many pictures a child can name in a minute. Early literacy was measured by the Test of Preschool Early Literacy (TOPEL) (Lonigan, Wagner, Torgeson, & Rashotte, 2007) a standardized measure with a mean score of 100 and a standard deviation of 15. Two subtests were administered: Phonological Awareness (breaking up words by sounds) and Print Knowledge (naming letters and sounds).

Numeracy and math skills were measured by the Woodcock-Johnson Tests of Achievement (WJ-III): Applied Problems and Quantitative Concepts subtests (Woodcock, McGrew, & Mather, 2001). Applied Problems measures mathematics problem solving including simple counting, addition, and subtraction. Quantitative Concepts assesses knowledge about mathematical factual information (i.e., identifying numbers, shapes, and sequences). The WJ-III is a standardized measure.

Teacher reported child assessment measures. The Social Competence and Behavior Evaluation short form (SCBE-30) is a teacher report consisting of 30 questions that provides an assessment of preschool emotional adjustment and social competence. Three subscales are measured: Social Competence (emotionally mature, pro-social behaviors), Anger Aggression (oppositional behaviors, poor frustration tolerance), and Anxiety Withdrawal (anxious, depressed). Each subscale consists of 10 items rated on a 6 point scale indicating the frequency a child engages in a behavior ranging from 1 = "Never" to 6 = "Always". Each subscale has a total of 60 possible points with higher scores indicating increased behaviors in social competence, anger/aggression, or anxiety/withdrawal (note that lower scores are more desirable in Anger Aggression and Anxiety Withdrawal).

The Preschool Learning and Behavior Scale (PLBS) Persistence subscale is a teacher report checklist that assesses children's observable approaches to learning, specifically attention/persistence. The PLBS consists of 29 items concerning children's behavior (i.e. "pays

attention to what you say") for which teachers mark 1 = "most often applies", 2 = "sometimes applies", or 3 = "doesn't apply". The persistence subscale uses 9 of these items, for a possible total of 27.

Table 47. Mean fall and spring scores by assessment and household income

	Full Sample			Low Income Children			Higher Income Children		
PPVT-4	**n**	**M**	**SD**	**n**	**M**	**SD**	**n**	**M**	**SD**
Fall	676	100.32	19.04	406	93.6	16.95	229	114.01	14.61
Spring	589	103.89	17.96	347	96.78	16.18	213	116.63	12.36
IGDI - Picture Naming									
Fall	662	23.21	7.65	399	21.62	7.71	222	26.59	6.18
Spring	587	25.77	7.1	345	23.96	7.04	214	28.69	5.86
TOPEL Phonological Awareness									
Fall	538	97.45	14.02	306	93.38	13.53	200	104	12.51
Spring	555	99.76	15.15	319	95.83	14.81	212	105.72	13.62
TOPEL Print Knowledge									
Fall	637	103.77	14.51	376	101.41	14.62	226	108.29	13.04
Spring	561	106.76	12.02	324	104.75	13.18	213	110.12	8.88
Woodcock-Johnson- III Applied Problems									
Fall	622	105.88	12.44	368	101.84	11.01	224	112.82	11.29
Spring	560	106.14	12.52	323	101.97	11.52	213	112.51	11.19
Woodcock-Johnson-III Quantitative									
Fall	616	99.43	14.02	362	95.23	12.19	224	106.83	13.55
Spring	556	101.16	14.07	319	96.96	12.74	213	107.77	13.03
SCBE-30 Social Competence									
Fall	525	40.68	9.22	313	39.52	9.32	187	43.01	8.47
Spring	478	42.69	9.37	275	41.09	9.27	178	45.33	8.76
SCBE-30 Anxiety Withdrawal									
Fall	555	18.04	7.49	321	18.68	7.91	208	17.02	6.89
Spring	511	17.28	6.45	300	18.02	6.96	185	16.06	5.17
SCBE-30 Anger Aggression									
Fall	571	19.02	9.13	337	19.94	9.4	208	17.25	8.06
Spring	525	18.44	8.88	305	19.48	9.66	196	16.67	6.86
PLBS Persistence									
Fall	584	19.24	3.09	342	18.92	3.04	214	19.73	3.1
Spring	545	19.63	2.98	315	19.32	3.11	201	20.24	2.7

Source: Child Trends Child Assessment Data

The full sample means are close to the national averages on the child assessments. When broken down by income, however, the low-income group is starting with lower scores than the high-income group. For example, the low-income group is scoring below the national average on

the PPVT while the high-income group is scoring about a standard deviation above the national average.

Children's Developmental Gains from Fall to Spring

Child assessment data were combined across the three cohorts in order to examine average changes in scores from fall to spring. For each child, change scores were calculated by subtracting the fall score on a given measure from the spring score. Positive change scores represent gains from fall to spring, and negative scores indicate that children decreased their scores from fall to spring (note: negative change scores are desirable for the SCBE-30 Anxiety Withdrawal and Anger Aggression subscales). Mean change scores for each measure are presented in Table 48. For example, the mean change on the PPVT was 2.81 points, indicating that, on average, children increased on the PPVT by nearly three points from fall to spring. Paired sample t-tests were conducted on all measures. For the full sample, statistically significant fall to spring change scores are bolded and starred. Statistically significant gains were made on all measures except Applied Problems and reduced Anxiety Withdrawal. The fall to spring change on Anger Aggression indicated increased scores on oppositional behavior and frustration tolerance. All other changes were in the positive, desired direction.

Table 48. Mean fall to spring change scores on child assessment measures.

Full Sample	N	Mean	SD	t	p	Cohen's d
IGDI Picture Naming	555	2.19	6.47	7.97	**<.0001***	0.34
PPVT Standard Score	567	2.81	9.14	7.33	**<.0001***	0.31
TOPEL Phonological Awareness (SS)	454	3.25	11.16	6.2	**<.0001***	0.29
TOPEL Print Knowledge (SS)	533	2.49	9.53	6.01	**<.0001***	0.26
WJ-III Applied Problems (SS)	523	0.15	8.54	0.4	0.6861	0.02
WJ-III Quantitative Concepts (SS)	517	1.09	9.36	2.66	**<.01***	0.12
SCBE-30 SC	385	1.89	7.4	5	**<.0001***	0.26
SCBE-30 AW	429	-0.39	5.17	-1.56	0.1193	-0.08
SCBE-30 AA	451	0.62	6.15	2.15	**<.05***	0.10
PLBS Persistence	472	0.36	2.21	3.5	**<.001***	0.16

*Statistically significant changes from fall to spring.
Source: Child Trends Child Assessment Data

Children from low-income families are a priority in Parent Aware and the evaluation. Change scores for the sub-group of children from families with annual incomes of less than $50,000 are presented in Table 49. Though patterns of significance are virtually the same as the full sample (with the exception of the PLBS), in several cases Cohen's d is larger in the low-income subgroup, indicating effects of greater magnitude[20] (see Table 49).

[20] An effect size less than .3 is typically considered "small", between .3 and .8 "medium", and .8 or higher "large".

Table 49. Mean fall to spring change scores on child assessment measures for children from low-income families.

Low Income Sample	N	Mean	SD	t	p	Cohen's d
IGDI Picture Naming	324	2.48	6.31	7.09	**<.0001***	0.39
PPVT Standard Score	331	3.31	8.98	6.71	**<.0001***	0.37
TOPEL Phonological Awareness (SS)	250	4.79	14	5.41	**<.0001***	0.34
TOPEL Print Knowledge (SS)	303	3	10.77	4.84	**<.0001***	0.28
WJ-III Applied Problems (SS)	296	0.42	8.3	0.87	0.3858	0.05
WJ-III Quantitative Concepts (SS)	290	1.4	9.01	2.65	**<.01***	0.16
SCBE-30 SC	218	1.34	7.76	2.56	**<.02***	0.17
SCBE-30 AW	240	-0.32	5.98	-0.83	0.4069	-0.05
SCBE-30 AA	255	1.04	7.13	2.33	**<.03***	0.15
PLBS Persistence	262	0.23	2.36	1.59	0.1121	0.10

*Statistically significant changes from fall to spring.
Source: Child Trends Child Assessment Data

Predictors of Children's Developmental Gains

A central goal of Parent Aware is to promote high quality early care and education programs that are developmentally beneficial for children; thus, a key question in the Evaluation asks whether dimensions of the Parent Aware Rating Tool are associated with children's developmental gains. Linkages between dimensions of program quality, specifically Parent Aware quality category scores (the total scores on Family Partnerships, Teaching Materials and Strategies, Tracking Learning, and Teacher Training and Education),observational measures and children's developmental gains are addressed in this section. Prior to examining these linkages, it is important to account for other child and family characteristics that also may be associated with developmental gains.

Child and family characteristics. The Parent Aware Evaluation collected information on the children in Parent Aware programs and their families. As described in Section 6, children were recruited into the evaluation in three cohorts in the fall of 2008, the fall of 2009, and the fall 2010. The first two cohorts (n = 421) made up the sample of children reported on in the Year 3 Evaluation Report. Current analyses include the same children plus an additional cohort for a total of 701 children.

Several characteristics of children and families may play a role in children's developmental outcomes, and must be taken into account in analyses examining linkages with program quality. As described in the Year 3 Evaluation Report, household income was a significant predictor of children's initial assessments (fall scores). Mothers' level of education and child race also predicted some outcomes. For the present analyses, several models were run to examine the associations between program quality and child outcomes while controlling for the following child and family characteristics: Household income, mother's highest level of education, father's highest level of education, race/ethnicity (White, Black, Asian, Native

American/Pacific Islander, Hispanic, African, other), marital status (married, single, living with partner, separated, divorced/widowed), home language, and immigrant status (see Section 6 for complete child and family demographic information).[21]

Program characteristics. The Evaluation uses several approaches to try to understand the linkages between characteristics of early care and education programs and child outcomes. Three types of models are tested for the full sample and for low-income children separately:

- Linkages between Parent Aware quality category scores and child outcomes
- Linkages between observed quality measures and child outcomes
- Linkages between star level and child outcomes

The expectation is that higher scores on measures of quality will be related to more optimal developmental outcomes.

Quality category scores. Fully-rated programs in Parent Aware receive subtotal scores in four quality indicator categories: Family Partnerships, Tracking Learning, Teacher Training and Education, and Teaching Materials and Strategies. Multilevel models were run to test for the effects of quality indicator categories on child outcomes. Multilevel models are appropriate when individuals are nested within groups, in this case, children are nested in early care and education programs. The multilevel model tests the effects of variables at level 2 (programs) on outcomes at level 1 (child outcomes). That is, are program scores in each of the quality indicator categories predictive of how children in those programs perform on the child assessment battery? The following approach was used in these analyses: For each child outcome (change score), the first model was run with all four quality category scores as predictors and all child and family characteristics as covariates. The first model was then checked to see which covariates were significant. A second model was run which included all four quality category predictors as well as household income, mother's education, and any other covariates that were significant in the first model. These models assume correlations, not causal linkages between quality and outcomes.

Results for the models are presented in Appendix D. To summarize, with the full model (including all four quality categories), there was no evidence for a positive relationship between Parent Aware quality category scores and child outcomes in the full sample. The only significant finding was not in the predicted direction: Tracking Learning negatively predicted change on the Social Competence scale. In other words, as points for Tracking Learning went up, scores on the Social Competence scale went down.

In follow-up analyses, a series of models were run on each child outcome that included only one quality category predictor at a time. These models revealed some evidence of relations between quality category scores and the Print Knowledge scores in the predicted direction. Specifically, Tracking Learning ($B = .63$, $SE = .30$, $p < .05$), Teacher Training and Education ($B = .94$, $SE = .33$, $p < .01$), and Teaching Materials and Strategies ($B = 1.37$, $SE = .51$, $p < .02$) all significantly predicted Print Knowledge when they were in a model that did not include the other quality category scores as predictors. Tracking Learning, Teacher Training and Education, and

[21] Unconditional models were also tested with no change in the overall pattern of results.

Teaching Materials and Strategies are correlated with each other ($p < .0001$), resulting in no single predictor accounting for a significant amount of variance above and beyond the other predictors when all are included in the model. However, when each predictor is tested alone, they significantly predict Print Knowledge. This was not the case for any other child outcome.

Observed quality. Another source of information about the quality of programs is the observational measures used in Parent Aware and in the Evaluation. Multilevel models were used to test the relationships between the ECERS-R, CLASS, FCCERS-R, and ECERS-E and child outcomes. The ITERS was not included in these analyses because the development of children in infant/toddler classrooms was not assessed. The analytic approach was similar to that used with the quality category scores. First, a full model was run on the full sample (all children including those in fully-rated and automatically-rated programs) which included the ECERS-R total score and all three CLASS subscales (Emotional Support, Classroom Organization, Instructional Support) as predictors and all child and family level covariates. A second model was run that included all three predictors, household income, mother's education, and any other covariates that were significant in the first model. Because automatically-rated programs in Parent Aware go through a different rating process, do not receive Parent Aware supports, and do not receive observations through Parent Aware (only a select group of automatically-rated programs received observations through the evaluation), the same analyses were then repeated on the sample of children from fully-rated programs only. The approach was also used for models using the FCCERS-R as a predictor and for models using the ECERS-E scores as predictors. Results from all models are presented in Appendix D. Significant results are discussed here.

ECERS-R and CLASS. The only significant findings in the expected direction across all child outcomes in the full sample was that expressive vocabulary (IGDI) was significantly predicted by the ECERS-R ($p < .05$) and CLASS Emotional Support ($p < .05$). Expressive vocabulary was also significantly predicted by CLASS Classroom Organization, but not in the expected direction ($p < .01$).

When the same models were run on the child sample from fully-rated programs only, additional significant relationships between the ECERS-R and CLASS and child outcomes emerged. Expressive vocabulary was predicted by the ECERS-R ($p < .001$), CLASS Emotional Support ($p < .05$), in the expected direction and CLASS Classroom Organization (not in the expected direction, $p < .01$). In the expected direction, the Quantitative Concepts was significantly predicted by the ECERS-R ($p < .05$) and the Social Competence scale was predicted by CLASS Classroom Organization ($p < .05$). In the unexpected direction, CLASS Instructional Support predicted the Social Competence (negatively, $p < .05$), the Anger-Aggression scale ($p < .001$) and the Persistence scale (negatively, $p < .05$).

FCCERS-R. The only significant finding for the relationship between FCCERS-R total score and child outcomes was that FCCERS-R predicted Anger-Aggression in the expected direction (negatively, $p < .001$) in both samples.

ECERS-E. Similar to the other observational measures, a few statistically significant relations between ECERS-E subscales and child outcomes were found. In the full sample of

programs and children, Print Knowledge was predicted by ECERS-E Literacy ($p < .05$), ECERS-E Diversity predicted both Applied Problems ($p < .01$) and Social Competence ($p < .05$), and ECERS-E Math negatively predicted Persistence ($p < .05$). In the fully-rated sample, the relation between ECERS-E Math and Persistence held (negative, $p < .05$). In addition, ECERS-E Literacy negatively predicted Anxiety-Withdrawal ($p < .05$). All ECERS-E findings were in the predicted direction except for the relation between ECERS-E Math and Persistence.

Star Rating Level. The Evaluation also examined the relation between overall program quality, as indicated by Parent Aware star rating (1, 2, 3, or 4 stars), and child outcomes. If the children in higher rated programs are making stronger developmental gains than children in lower rated programs, it would suggest that Parent Aware is succeeding in assigning ratings that capture meaningful distinctions in quality (though it does not suggest that Parent Aware *caused* the gains). Given the unequal distribution of programs across star level (for example, the Evaluation did not have any children from 1-star programs, and very few from 2-star programs), these analyses were not possible for the Year 3 report. In the present analyses, we examined the relation between star level and child outcomes in 1- and 2-star programs (collapsed), 3-star programs, and 4-star fully-rated programs.

Multilevel models were used to test the effect of star rating on each child outcome, controlling for all child and family covariates. There was marginal evidence that the Print Knowledge subscale varied by star level. However, this finding was not a robust finding, and did not hold true in variations of the models (i.e. treating star level as a continuous variable vs. a categorical variable), and only suggests a trend. No other evidence for differences in child outcome by star level in the expected direction was found. Star level significantly predicted Social Competence, but not in the expected direction (children in 1- and 2-star programs scored higher than children in 4-star programs).

To further examine the relation between star rating and child outcomes, models were run comparing 1- and 2-star programs (collapsed) to 3- and 4-star programs (collapsed) and automatically-rated 4-star programs. Findings mirrored that of the previous stars analyses, with marginal evidence for children in 3- and 4-star programs scoring higher than children in 1- and 2-star programs on Print Knowledge and star rating predicting Social Competence (not in the expected direction).

Predictors of Developmental Gains for Low-Income Children

As presented earlier in this section, change scores in child outcomes from fall to spring were often of a greater magnitude in a sample of children from households with lower incomes than in the full sample. To understand how quality measures and star levels related to outcomes for children with lower incomes, predictors of child outcomes were examined separately for low-income children in the sample (household incomes of less than $50,000 per year). The analytic approach was the same as described above. Relations between program characteristics and child outcomes were examined for low-income children (n = 426) as well as for low-income children attending only fully-rated programs (n = 113). Only significant findings are presented in this section.

Quality Category Scores. There were three significant findings, and two of those findings were not in the predicted direction. Specifically, Teacher Training and Education negatively predicted Expressive Vocabulary ($p < .001$) and Tracking Learning negatively predicted Social Competence ($p < .05$). The only finding in the predicted direction was Teacher Training and Education predicting Quantitative Concepts ($p < .02$).

ECERS-R and CLASS. The ECERS-R was predictive of Expressive Vocabulary (in the expected direction) and the Anxiety-Withdrawal subscale (not in the expected direction) for low-income children fully-rated programs.

CLASS Classroom Organization was predictive (in the expected direction) of Applied Problems and Social Competence for low-income children in the fully-rated sample. It also predicted Anxiety-Withdrawal (not in the expected direction) across all low-income children when all covariates were included in the model.

CLASS Instructional Support was related to Phonological Awareness for all low-income children (in the expected direction), negatively related to Print Knowledge for low-income children in fully-rated programs with all covariates (not in the expected direction), and predictive of all behavioral subscales (not in the predicted direction) among low-income children in fully-rated programs.

FCCERS-R. Findings in the expected direction were noted for the FCCERS-R in the sample of children from low-income households. In the expected direction, FCCERS-R significantly predicted Phonological Awareness, Applied Problems, Quantitative Concepts, and Anger-Aggression across all low-income children and (for Phonological Awareness and Anger Aggression) among low-income children in fully-rated programs. In the unexpected direction, FCCERS-R was negatively related to Expressive Vocabulary across low-income children and among low-income children in fully-rated programs, Social Competence across low-income children, and Applied Problems among low-income children in fully-rated programs.

ECERS-E. ECERS-E Diversity negatively predicted Print Knowledge (not in expected direction) and Anger-Aggression (in expected direction) across low-income children. Neither of these findings held among low-income children attending fully-rated programs. ECERS-E Math significantly predicted Phonological Awareness (in expected direction), Applied Problems (in

expected direction) and Quantitative Concepts (not in expected direction) for low-income children in fully-rated programs. ECERS-E Literacy was negatively predictive of Print Knowledge (not in expected direction), ECERS-E Diversity significantly predicted TOPEL Phonological Awareness (not in expected direction), Quantitative Concepts (in expected direction), and Social Competence (in expected direction).

Star Rating Level. Generally speaking, there was no evidence for a relationship between star level and child outcomes for the low-income sample. There was some evidence for differences in the Receptive Vocabulary (PPVT) across star levels, but these findings were not robust to variations in models. In addition, the average PPVT change scores for the low-income sample did not follow a linear increase across stars. Specifically, the 1- and 2-star group had a mean change of -3.40, 3-stars had a mean change of 7.14, and the 4-star group had a mean PPVT change score of 4.67.

To further examine the relation between star rating and child outcomes, models were run comparing 1- and 2-star programs (collapsed) to 3- and 4-star programs (collapsed) and automatically-rated 4-star programs. The only significant findings were not in the expected direction (Anger-Aggression and Persistence).

Summary of Parent Aware Quality Measures and Children's Developmental Gains

Results of the analyses presented in this section are summarized in Table 50 and Table 51. Multilevel modeling was used to examine the relationships between characteristics of programs (quality category scores from the Parent Aware rating, scores on observational measures, and star ratings) and children's developmental gains, controlling for child and family characteristics. Similar to results from the Year 3 Evaluation Report, the present analyses lack systematic evidence of strong relations between program quality and child outcomes. Several significant relations were found, but in many cases they were not in the predicted direction, and they failed to be robust across different models and sub-samples.

Table 50. Relationship between program quality and children's developmental gains (all children)

	All children in all programs		All children in fully-rated programs	
Predictors	**Expected Direction**	**Not Expected Direction**	**Expected Direction**	**Not Expected Direction**
Family Partnerships	*Can't be tested*		none	none
Tracking Learning	*Can't be tested*		TOPEL PK[A]	SCBE-30 SC
Teacher Training/Education	*Can't be tested*		TOPEL PK[A]	none
Teaching Materials and Strategies	*Can't be tested*		TOPEL PK[A]	none
ECERS-R	IGDI	none	IGDI, WJ-QC	none
CLASS Emotional Support	IGDI	none	IGDI	none

	All children in all programs		All children in fully-rated programs	
Predictors	**Expected Direction**	**Not Expected Direction**	**Expected Direction**	**Not Expected Direction**
CLASS Classroom Organization	none	IGDI	SCBE SC	IGDI
CLASS Instructional Support	none	none	none	SCBE SC, SCBE AA, PLBS
FCCERS	SCBE AA	none	SCBE AA	none
ECERS-E Math	none	PLBS	none	PLBS
ECERS-E Literacy	TOPEL PK	none	SCBE AW	none
ECERS-E Diversity	WJ AP, SCBE SC	none	none	none
Star level	TOPEL PK[B]	SCBE SC	*Can't be tested*	

[A]Significant when predictor is in model alone, not when all quality categories are included together
[B]Marginal statistical significance

Table 51. Relationship between program quality and children's developmental gains (low-income children)

	Low-income children in all programs		Low-income children in fully-rated programs	
Predictors	Expected Direction	Not Expected Direction	Expected Direction	Not Expected Direction
Family Partnerships	*Can't be tested*		none	none
Tracking Learning	*Can't be tested*		none	SCBE SC
Teacher Training/Education	*Can't be tested*		WJ QC	IGDI
Teaching Materials and Strategies	*Can't be tested*		none	none
ECERS-R	none	none	IGDI	SCBE AW
CLASS Emotional Support	none	none	none	none
CLASS Classroom Organization	none	SCBE AW	WJ AP, SCBE SC	none
CLASS Instructional Support	TOPEL PA	none	none	TOPEL PK, SCBE SC, AW, AA
FCCERS	TOPEL PA, WJ AP, SCBE AA	IGDI, SCBE SC	TOPEL PA, WJ QC, SCBE AA	IGDI, WJ AP
ECERS-E Math	none	none	TOPEL PA, WJ AP	WJ QC
ECERS-E Literacy	none	none	none	TOPEL PK

	Low-income children in all programs		Low-income children in fully-rated programs	
ECERS-E Diversity	SCBE AA	TOPEL PK	WJ QC, SCBE SC	TOPEL PA
Star level	PPVT[C]	PLBS, SCBE AA	*Can't be tested*	

[C]not a robust finding across models

Evidence for relations between quality category scores and child outcomes was relatively weak and somewhat inconsistent for Print Knowledge and Quantitative Concepts.

There was some consistency across models and samples in the results for the ECERS-R and CLASS predicting child outcomes with evidence for Expressive Vocabulary and Quantitative Concepts and Social Competence. CLASS Instructional Support was related to several child outcomes in the non-predicted direction.

Across all children, there was one significant relationship with the FCCERS-R and Anger-Aggression in the predicted direction, and with Phonological Awareness, Applied Problems and Quantitative Concepts. Several significant relations were found that were not in the predicted direction.

The findings for the ECERS-E differed for the full sample of children and for low-income children examine separately. For all children in fully-rated programs, Literacy was negatively predictive of Anxiety-Withdrawal. For low-income children in fully-rated programs, Math predicted Phonological Awareness and Applied Problems, and Diversity predicted Quantitative Concepts and Social Competence. There were also several relations between ECERS-E and child outcomes that were not in the predicted direction.

Finally, there was minimal evidence for a link between overall star rating and child outcomes. There was a suggestion of a relation between stars and Print Knowledge in the full sample of children, but it was not a robust finding. And, as with the other models, there were two instances in which stars was significantly predictive of child outcomes, but not in the predicted direction.

The present analyses revealed several instances of significant relationships between program characteristics and child outcomes. While no systematic pattern of linkages emerged, there is moderate evidence to suggest that the different quality measures examined are related in expected ways more often to measures of language, literacy and math. Negative linkages were more likely to be noted among quality measures and the measures of children's social-emotional development. These results are not conclusive but hint that the measures used in Parent Aware may be capturing practices more likely to be linked to cognitive development. Further work is needed to identify measures that are linked in expected ways to measures of children's social emotional development and approaches to learning.

Issues such as selection bias (children with certain characteristics served in certain programs), low ranges of observed quality, and small sample sizes of children in programs with lower quality ratings may still be preventing systematic relations between programs

characteristics and child outcomes from emerging in the present analyses. It will be important to continue exploring linkages with Parent Aware quality measures and children's developmental outcomes in the future and to use the findings to promote refinements to the Parent Aware Rating Tool.

Recommendations

- Continue to weigh options for strengthening the measurement of quality in Parent Aware, either through the inclusion of alternative quality measures or through procedures that tighten the conditions under which quality scores are obtained (for example, clarifying the classroom activities that can be used for scoring the CLASS and strengthening reliability standards).

- Use the findings from the analysis of children's developmental gains to inform professional development for teaching staff and family child care providers. For example, findings indicate that children are not making strong gains on some pre-math skills in the year before Kindergarten. Similarly, children are rated by their teachers and family child care providers as having increased issues with oppositional behavior and frustration tolerance across the school year. These findings represent important opportunities to provide support for teachers and family child care providers working with young children on these critical school readiness skills.

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Section 8. Alternative Rating Structures

Purpose of this Section:

One of the key components of a Quality Rating and Improvement System is its rating structure - the system used to measure and rate a program's quality. While many states agree about the basic elements of quality to included in quality standards, there is no consensus about how the standards should be structured or incorporated into rating tools. For example, ***should quality levels be transparent so that all programs at a given level meet the same standards or should quality levels be determined using multiple pathways for meeting standards (so that providers at the same level may meet different standards)?***

As shown in the QRIS Compendium, there are three basic models for structuring a QRIS. The first is a points system in which points are awarded for each quality indicator and star level is based on the total number of points earned and not on the specific indicators met. The second is a block system in which indicators are associated with a particular star level, and a program receives a star level when they meet all the indicators assigned to that level and all indicators assigned to all lower levels. The third basic category of rating structure is a combination of a points system and a block system, such that some standards are required at a particular level, but programs can also advance by earning points across non-required standards. While there is no one model that is most accurate and preferable, it is important to explore the strengths and weaknesses of multiple rating structures.

Currently, the Parent Aware pilot QRIS used a modified points system, and a hybrid block and points model has been proposed for statewide expansion. The timing is ideal to reflect on rating structure choice and to explore the potential benefits and costs of different rating structure. This section proposes alternative rating models that can be considered.

Key Findings:

- If measures of observed quality were removed from the rating structure, programs would not receive significantly different star ratings.
- If Parent Aware standards (including the observed quality measures) were structured as blocks, programs would receive significantly lower star ratings. Differences in star ratings would correspond to some differences in child outcomes (which serves as promising but not conclusive evidence of the validity of the block rating structure).
- If Parent Aware standards (including observed quality measures) were structured as a hybrid model, programs would receive significantly lower star ratings than in Parent Aware, but significantly higher ratings than in the block system. The differences in star ratings resulting from the hybrid structure do not correspond to differences in child outcomes.

This Section provides examples of how quality indicators that are already part of the Parent Aware rating structure could be used to model alternative rating structures and how changes in the rating structure might impact the distribution of programs across Levels. The designs or rating structures used in QRIS typically use one of three approaches: building blocks, points, or some combination of the two. In a building block design, all of the standards in one Level must be met before moving on to the next higher Level. In a points system, points are earned for each standard and are then added together so that each rating Level represents a range of possible total scores (Tout et al., 2010c). In the QRIS Compendium which reviewed 26 QRIS, twelve used building blocks, and seven used points. Five QRISs used a combination or hybrid approach which incorporates elements of both blocks and points. The Compendium found that QRIS with a building blocks system or hybrid system were more likely to have a higher proportion of child care facilities rated at the lower Levels of the scale. It appears that a building block system provides a higher threshold for receiving a rating at the top one or two Levels of the QRIS (Tout et al., 2010c).

Parent Aware currently utilizes a modified points system in which programs earn points for each indicator that is met and are assigned a star rating based on the number of points earned. In a traditional points system, points are awarded independently of one another, such that all indicators are optional and the points total can be reached through any combination of indicators. Parent Aware generally works as a points system, but with two exceptions:

1) Parent Aware requires that a program use an approved curriculum in preschool classrooms in order to earn three or more stars.
2) Parent Aware requires that center-based programs that serve preschoolers receive a score of at least 3.0 in each of the three CLASS subscales (or pursue an exception to this rule) in order to earn four stars.

In this section, we present three alternative rating structures and show how Parent Aware-rated programs would score in each model. All three alternative models are based on the four existing Parent Aware categories: Family Partnerships, Teaching Materials and Strategies, Tracking Learning, and Teacher Training and Education. The quality indicators (the specific items that are scored) are the same as used in the current Parent Aware system but are arranged and combined in new ways and may be assigned different point values. These analyses use the indicator data for 185 initial full ratings for 72 centers and 113 family child care providers.

Model 1

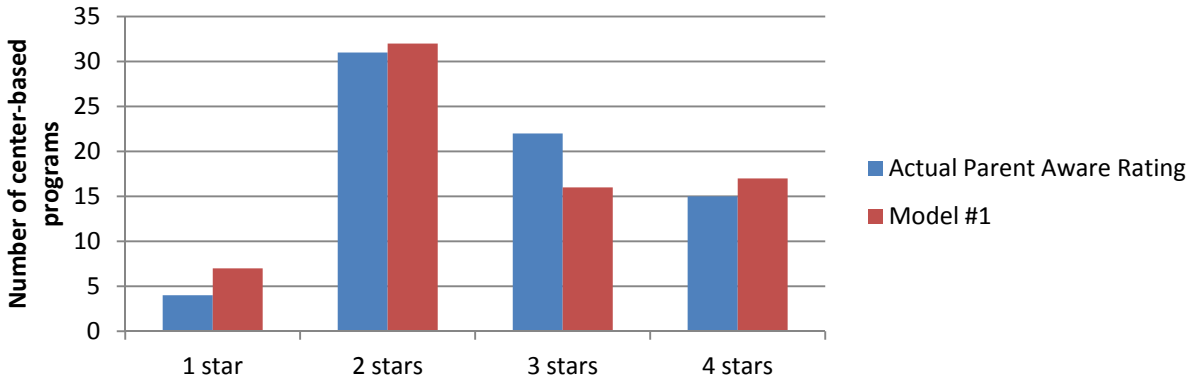
Model 1 is a points system that is nearly identical to the current Parent Aware system except that there are no points awarded for scores on the Environment Rating Scales or the CLASS. When observation measures are removed from the rating, there are only 5 points available in the Teaching Materials and Strategies category for family child care providers and 3 points available in the Teaching Materials and Strategies category for center-based programs. Thus, the total points that can be earned are 35 for family child care providers and 33 for center-based programs (rather than 40). However, most programs are not earning many points for their observation scores. Family child care providers are earning, on average, 63% of the non-observation points possible and 18% of the observation points possible. Center-based programs are earning, on

average, 68% of the non-observation points possible and 32% of the observation points possible. To account for this difference, the cut-off points for each star level were raised slightly, as a percentage of the total available points (see Table 52). For example, to earn 1-star a program must now earn at least 35% of the available points rather than 30% as in the original Parent Aware rating system. The resulting distribution of programs across star levels is shown in Figure 19.

Table 52. New star level assignments for rating scale that does not include observation measures

Threshold for star levels	Family child care	Center-based programs
1-star (less than 35% of points)	0 – 11.5 points	0 – 11 points
2-stars (at least 35% of points)	12 – 22.5 points	11.5 – 21 points
3-stars (at least 65% of points)	23 – 29 points	21.5 – 27.5 points
4-stars (at least 85% of points)	29.5 – 35 points	28 – 33 points

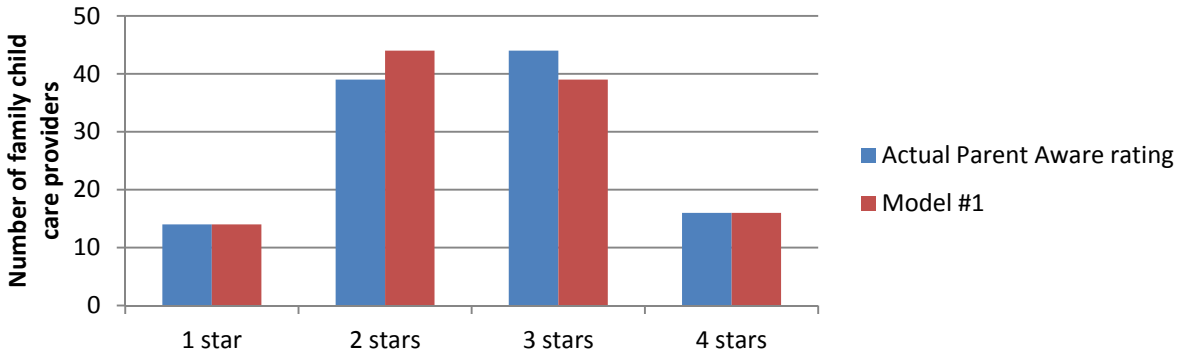
Figure 19. Star levels of 72 Center-based programs in Parent Aware compared to star levels in Model #1



As is shown in Figure 19, center-based programs were more likely to receive a rating of 1-, 2-, or 4-stars and less likely to receive a rating of 3-stars in Model #1 than in their actual Parent Aware rating. However, centers are not scoring significantly lower or higher in Model #1 than in their actual Parent Aware rating.

Figure 20 shows that family child care providers are more likely to receive 2-stars and less likely to receive 3-stars in Model #1 than in their actual Parent Aware rating. However, family child care providers are not receiving significantly different scores overall in Model #2 compared to their actual Parent Aware rating.

Figure 20. Star levels of 113 Family Child Care providers in Parent Aware compared to star levels in Model #1



How well does Model #1 differentiate quality? One way to examine how well a rating system is differentiating quality is to look at how observed quality varies by level. That is, observation scores can be used as a means to validate the quality levels. If the star levels represent increasing levels of quality, then programs at increasing levels should have corresponding increases in observation scores. This method of validation is difficult when the observation measures are endogenous to the rating system - as it is in Parent Aware - because the observation scores make up part of the star rating. By removing the observation measures from the rating, we are able to independently examine whether programs with higher star ratings demonstrate higher levels of observed quality than programs with lower star ratings.

In Figure 21 and Table 53, we examine the pattern of ERS scores by star level. Because Model #1 is so similar to actual Parent Aware ratings, it may be helpful to compare the findings from this section with the findings from Section 7 on validation of the current Parent Aware system.

Figure 21. Average ECERS-R, ITERS-R, and FCCERS-R Scores by Model #1 star levels

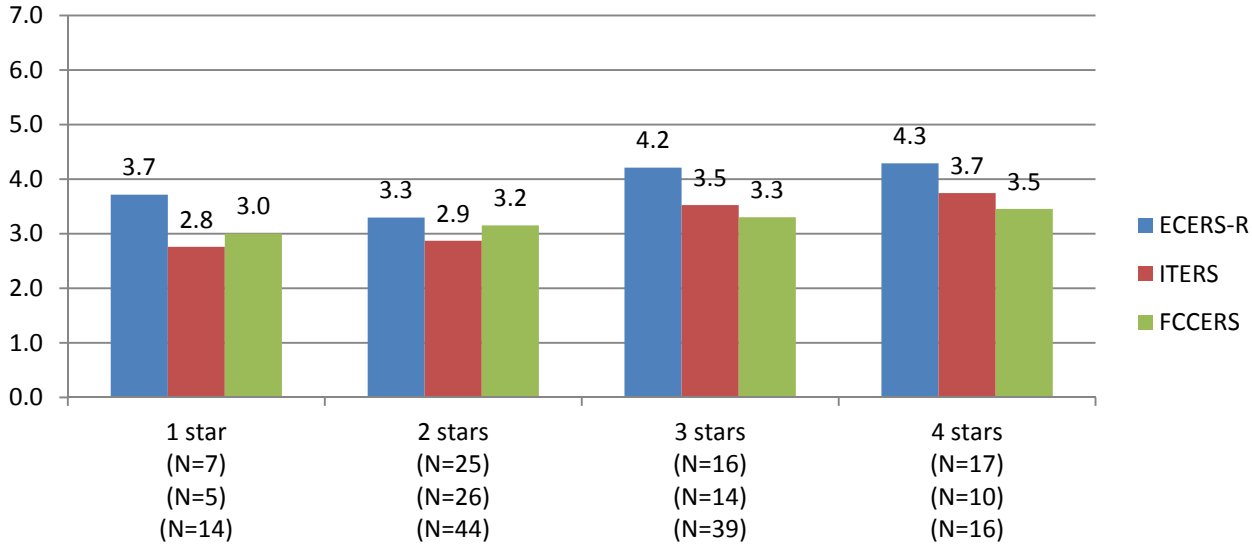


Table 53. Significance of patterns in ERS scores across star levels in Model #1

	ECERS-R	ITERS	FCCERS
Overall significance of trend	F(3,64)=7.43, p<.001	F(3,54)=4.22, p<.01	F(3, 112)=1.06, p>.05 Not significant
1-star vs. 2-stars			
1-star vs. 3-stars		p<.05	
1-star vs. 4-stars	p<.05	p<.05	
2-stars vs. 3-stars	p<.001	p<.01	
2-stars vs. 4-stars	p<.001	p<.01	
3-stars vs. 4-stars			

Using a one-way analysis of variance (ANOVA; a statistical method for comparing average scores), there were statistically significant differences in mean ECERS-R scores across the Model #1 star levels, F(3,64)=7.43, p<.001. Post hoc analyses indicated that both 4-star programs and 3-star programs scored significantly higher than 2-star programs and that 4-star programs scores significantly higher than 1-star programs. These findings are nearly identical to the pattern of significance found in ECERS-R scores among the original Parent Aware rating levels.

A similar pattern emerged for ITERS-R scores. A one-way ANOVA with post hoc analyses showed that there were statistically significant differences in mean ITERS-R scores across Model #1 star levels, F(3,54)=4.22, p<.01, with 3-star programs and 4-star programs scoring significantly higher than 2-star programs and 1-star programs. In contrast, using the original Parent Aware star levels, no significant difference was found in ITERS-R scores between 4-star programs and 2-star programs.

In contrast, FCCERS-R scores showed no significant pattern. There were no statistically significant differences in mean FCCERS-R scores across Model #1 star levels, F(3, 112)=1.06, p>.05, and no differences between individual star levels. In contrast, for the original Parent Aware rating levels, there were statistically significant differences in mean FCCERS-R scores across the star levels, F(3, 109) = 10.88, p < .0001, with 4-star fully-rated programs scoring significantly higher than 3-star, 2-star, and 1-star programs.

Figure 22. Average CLASS subscale scores by Model #1 star levels

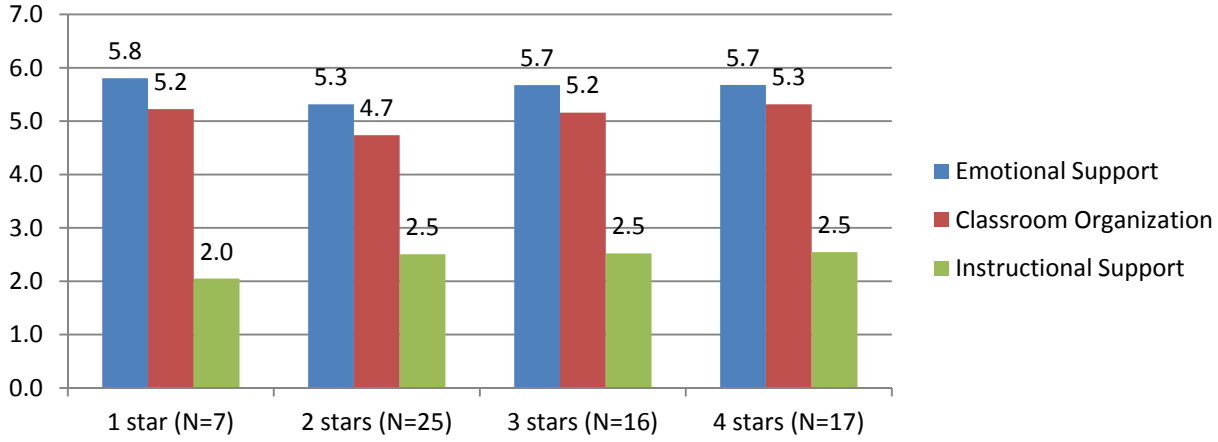


Table 54. Significance of patterns in CLASS scores across star levels in Model #2

	Emotional Support	Classroom Organization	Instructional Support
Overall significance of trend	F(3,64)=1.64, p>.05 Not significant	F(3,64)=2.46, p>.05 Not significant	F(3, 64)=0.88, p>.05 Not significant

As shown in Figure 22 and Table 54, a one-way ANOVA with post hoc analyses showed that there were no statistically significant differences in mean scores on any of the CLASS subscales.

These findings provide limited evidence for the effectiveness of this model to differentiate levels of quality. The evidence is slightly stronger for centers than for family child care providers.

Another way to evaluate how well a rating system differentiates quality is to examine how much children improve over the course of a year in programs at varying star levels. We therefore examined the differences in child gains by star level using multilevel modeling.[22] Because of the small number of children assessed in programs with 1 star in Model #1, for these analyses programs that earned 1 star and programs that earned 2 stars were considered together as a single group. In order to utilize all available child outcome data, these analyses include all ratings associated with child data (i.e. including some re-ratings of programs). We found that:

- Children in 4-star programs made significantly greater gains on TOPEL Print Knowledge than children in 1- and 2-star programs ($p < .05$).

[22] The following approach was used in these analyses: For each child outcome (change score), the first model was run with star rating levels as predictors and all child and family characteristics as covariates. The first model was then checked to see which covariates were significant. A second model was run which included all four quality category predictors as well as household income, mother's education, and any other covariates that were significant in the first model. Child and family characteristics considered were: Household income, mother's highest level of education, father's highest level of education, race/ethnicity (White, Black, Asian, Native American/Pacific Islander, Hispanic, African, other), marital status (married, single, living with partner, separated, divorced/widowed), home language, and immigrant status. For more details, see Section 6 on Child Outcomes.

- Children in 4-star programs made significantly greater gains on Woodcock-Johnson Quantitative Concepts than children in 3-star programs ($p < .05$).
- Children in 1- and 2-star programs made significantly greater gains on SCBE-30 Social Competence than children in 4-star programs ($p < .05$, this finding was not in the expected direction).

These findings provide little evidence for an effect of star level on child outcomes.

Model 2

Model 2 is a block system with one to three indicators required in each category at each level. To earn 4 stars in Model #2, all indicators must be met, including an average Career Lattice score of at least 8, a score of at least 5.0 on the Environment Rating Scale, and—for centers serving preschoolers—scores of at least 6.0 on the Emotional Support subscale, 5.0 on the Classroom Organization subscale, and 3.0 on the Instructional Support subscale of CLASS. To see which indicators were required at each level, refer to Table E1. Model 2 Rating Structure in Appendix E.

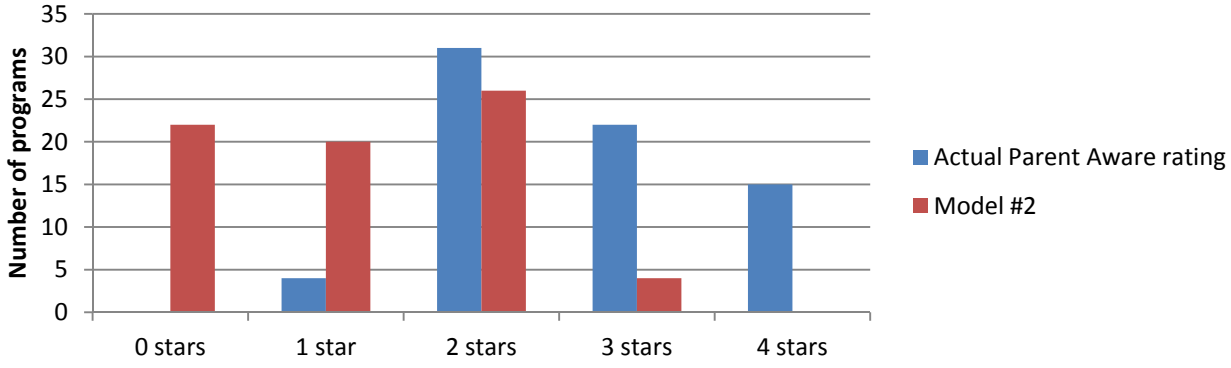
Table 55. Parent Aware points required at each level of Model #2

Model #2 Rating	Minimum Number of Parent Aware points that could earn the Model #2 star level
1-star	5 points for Centers, 6 points for Family Child Care
2-stars	12.5 points
3-stars	26.5 points for centers, 27.5 points for family child care
4-stars	38 points for centers, 40 points for family child care

As shown in Table 55 the minimum number of points required at each level of Model #2 is at least as high as the minimum number of points required at each level of Parent Aware. Therefore, it is not possible for a program to receive a higher rating in Model #2 than their actual Parent Aware rating.

Figures 23 and 24 compare the star levels earned by programs using the Parent Aware rating structure and using Model #2's rating structure.

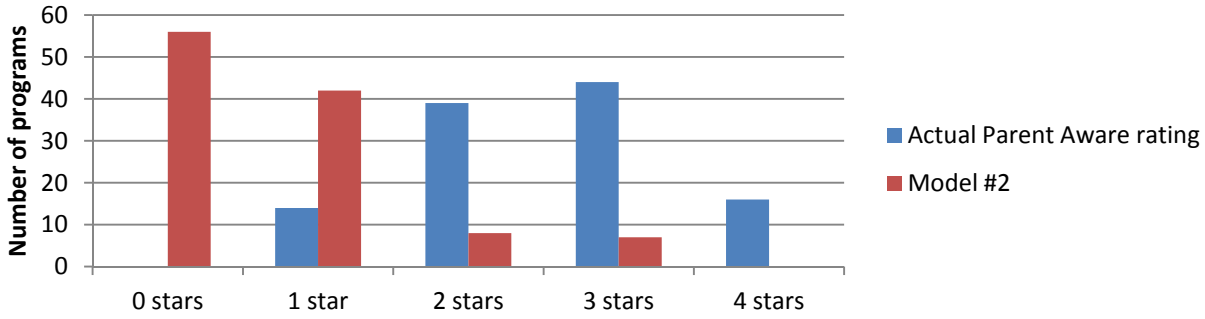
Figure 23. Star levels of 72 Center-based programs in Parent Aware compared to star levels in Model #2



Center-based programs scored significantly lower in Model #2 than in their actual Parent Aware rating ($p<.001$). In fact, 31% of all center-based programs did not meet all the requirements for a 1-star rating and therefore earned zero stars in Model #2.

- No center-based program that received a 1-star rating from Parent Aware was able to meet all of the requirements for a 1-star rating in Model #2.
- Only 42% of center-based programs that received a 2-star rating from Parent Aware met all of the requirements for a 1-star rating.
- Of the 18 centers that received at least 2 stars in Parent Aware and no stars in Model #2, the most common obstacle to achieving a 1-star rating in Model #2 was the requirement that all lead teachers have joined the Professional Development registry. Two-thirds of these programs received zero points for registering their staff on Professional Development Career Lattice.
- A quarter of center-based programs do not have an average ERS score of at least 3.0 and thus cannot move beyond 1 star in Model #2.
- Just 11% of centers that received a 3- or 4-star rating in Parent Aware were able to meet the requirements for 3 stars in Model #2.
- No center-based programs met the requirements for a 4-star rating in Model #2, in part because no center-based program had an *average* ERS score of 5.0 or higher.
    - Six programs had an average ECERS-R score of 5.0 or higher and two programs had an average ITERS-R score of 5.0 or higher, but no program had an overall average of 5.0 or higher.

Figure 24. Star levels of 113 Family Child Care providers in Parent Aware compared to star levels in Model #2



Like center-based programs, family child care providers scored significantly lower in Model #2 than in their actual Parent Aware rating ($p<.001$). In fact, 50% of all family child care providers did not meet all the requirements for a 1-star rating and therefore earned zero stars in Model #2.

- No family child care provider that received a 1-star rating from Parent Aware was able to meet all of the requirements for a 1-star rating in Model #2.
- Only 23% of family child care providers that received a 2-star rating from Parent Aware met all of the requirements for a 1-star rating in Model #2.

- Of the 42 family child care providers that received at least 2 stars in Parent Aware and no stars in Model #2, the most common obstacles to achieving a 1-star rating in Model #2 were:
  1) the requirement that the provider be able to document using an assessment tool of any kind to track children's progress for at least for one age group (unmet by 55% of these providers)
  2) the requirement that the provider must have joined the PD registry (unmet by 33% of these providers).
- Over a third (39%) of family child care providers do not have an average ERS score of at least 3.0 and thus cannot move beyond 1 star in Model #2.
- Just 12% of family child care providers that received a 3- or 4-star rating in Parent Aware were able to meet the requirements for 3 stars in Model #2.
- No family child care providers met the requirements for a 4-star rating in Model #2, in part because only three family child care providers received a FCCERS-R score of 5.0 or higher.

How well does Model #2 differentiate quality? When observational measures are a part of a building blocks system, it is difficult to use observational measures to validate how well the rating structure is differentiating quality. However, the fact that a particular score on the ERS and CLASS is not required until star level 2 means that any differences seen between the ERS scores and CLASS scores of programs with zero stars and programs with 1-star can be seen as an indication that the rating structure is capturing some observable difference in quality between those two levels.

Figure 25 and Table 56 show there are no significant differences in observed environmental quality between center-based programs with zero stars and center-based programs with 1-star on the ECERS-R or ITERS-R. In contrast, there is a significant difference in FCCERS-R scores for family child care providers with zero stars and family child care providers with 1-star ($p<.005$). This difference is not explained by the requirements of the rating model, so it may be seen as evidence that the model effectively differentiates levels of quality.

Figure 25. Average ECERS-R, ITERS-R, and FCCERS-R Scores by Model #2 star levels

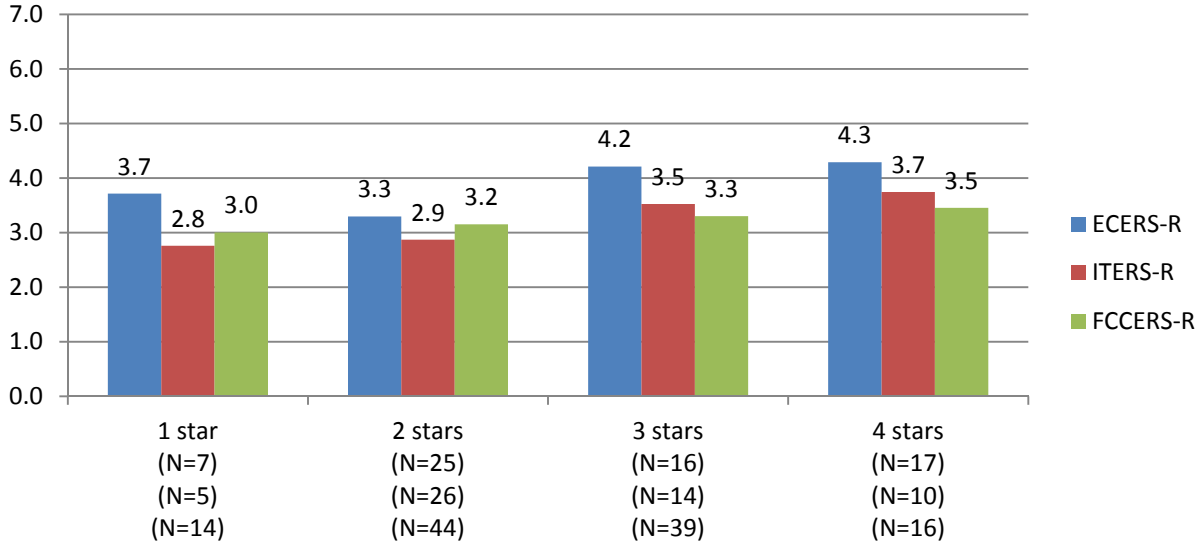


Table 56. Significance of patterns in ERS scores across star levels in Model #2

	ECERS-R	ITERS-R	FCCERS-R
Overall significance of trend	F(3,65)=7.03, p<.001	F(3, 54)=10.99, p<.0001	F(3, 112)=10.05, p<.0001
Zero stars vs. 1-star			p<.05
Zero stars vs. 2-stars	p<.001	p<.01	p<.001
Zero stars vs. 3-stars	p<.05	p<.0001	p<.0001
1-star vs. 2-stars	p<.01	p<.05	
1-star vs. 3-stars		p<.001	p<.001
2-stars vs. 3-stars		p<.0001	p<.01

We would expect to see a difference in ERS scores between programs with 2-stars and those with 3-stars since programs are required to have a score of at least 4.0 to reach 3-stars. This difference is indeed found for the ITERS-R and the FCCERS-R, but it is not found for the ECERS-R. This is likely attributable to the very small number of center-based programs with 3-stars (N=3).

In Figure 26 and Table 57, we examine the difference in CLASS subscale scores by Model #2 star levels. We find that there is no significant difference between the scores of programs that earn zero stars and programs that earn 1-star. There are, however, significant differences between 1-star, 2-star, and 3-star programs in the Emotional Support subscale and the Classroom Organization subscale. These differences are partially, but not completely, driven by the requirements of the rating system. These findings lend support to the hypothesis that this model effectively differentiates between quality levels.

Figure 26. Average CLASS subscale scores by Model #2 star levels

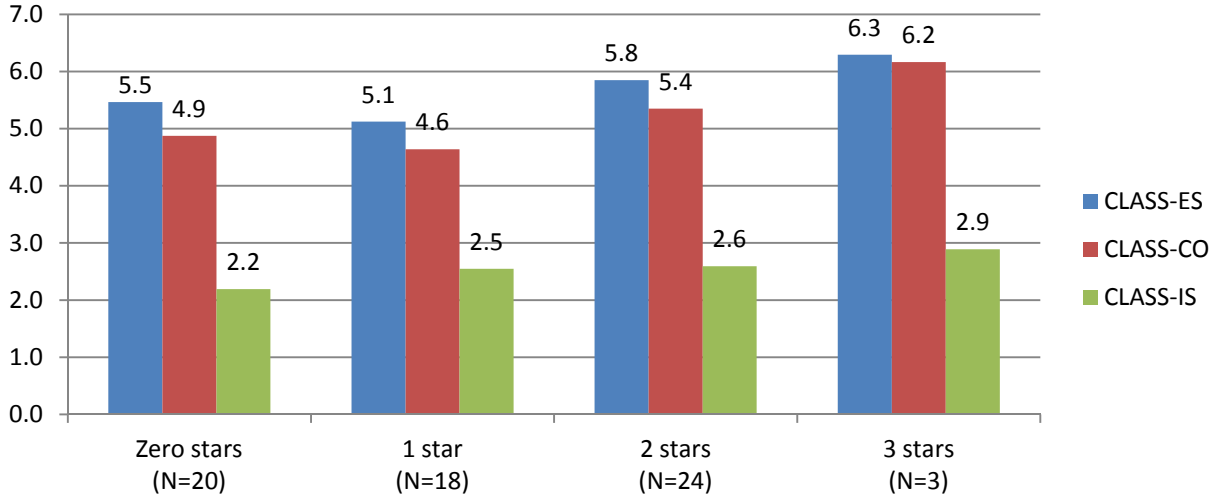


Table 57. Significance of patterns in CLASS scores across star levels in Model #2

	Emotional Support	Classroom Organization	Instructional Support
Overall significance of trend	F(3,64)=5.95, p<.001	F(3, 64)=6.98, p<.001	F(3,64)=1.64, p>.05 Not significant
Zero stars vs. 1-star			
Zero stars vs. 2-stars	p<.05	p<.05	
Zero stars vs. 3-stars	p<.05	p<.01	
1-star vs. 2-stars	p<.001	p<.001	
1-star vs. 3-stars	p<.05	p<.01	
2-stars vs. 3-stars	p<.05	p<.05	

Another way to evaluate how well a rating system differentiates quality is to examine how much children improve over the course of a year in programs at varying star levels. We therefore examined the differences in child gains by star level using multilevel modeling.[23] Again, we utilized all ratings associated with child data that was available, including some 4-star re-ratings (that are not included in the first part of this section). Because of the small number of children enrolled in 4-star programs, 3- and 4-star programs were combined into one group. We found that:

- Children in 3- and 4-star programs made significantly higher gains on the TOPEL-Print Knowledge than children in programs with zero stars or 1-star (p<.01 for both).

[23] The following approach was used in these analyses: For each child outcome (change score), the first model was run with star rating levels as predictors and all child and family characteristics as covariates. The first model was then checked to see which covariates were significant. A second model was run which included all four quality category predictors as well as household income, mother's education, and any other covariates that were significant in the first model. Child and family characteristics considered were: Household income, mother's highest level of education, father's highest level of education, race/ethnicity (White, Black, Asian, Native American/Pacific Islander, Hispanic, African, other), marital status (married, single, living with partner, separated, divorced/widowed), home language, and immigrant status. For more details, see Section 6 on Child Outcomes.

- Children in 3- and 4-star programs made significantly higher gains on the Woodcock Johnson Applied Problems than children in programs with zero stars or 1-star ($p<.05$ and $p<.01$, respectively).
- Children in 3- and 4-star programs made significantly higher gains on the Woodcock Johnson Qualitative Concepts than children in programs with zero, 1- or 2-stars ($p<.05$ for all three).
- Children in 3- and 4-star programs score significantly higher than children in 2-star programs on SCBE-30 Anxiety-Withdrawal ($p < .05$, not in expected direction, as a decreased score on the measure is desirable).

These findings provide some evidence for an effect of star level on child outcomes. On three measures, the highest rated programs (those with 3- or 4-stars) are showing the greatest gains. On one measure (SCBE-Anxiety-Withdrawal), programs with 2-stars are showing the most desirable change. Because of these mixed results, we cannot draw any firm conclusions from this analysis about the effectiveness of the model in differentiating quality, but we do see preliminary evidence that this model may meaningfully differentiate levels of quality, at least at the higher levels.

Model #3

Model #3 is a hybrid rating system informed by the revised Parent Aware indicators described in Minnesota's Race to the Top application, where Levels 1 and 2 are designed as a block system and Levels 3 and 4 are designed as a points system. In other words, all requirements in Level 1 must be achieved to earn a Level 1 rating and all requirements in both Level 1 and Level 2 must be met in order to earn a Level 2 rating. After a facility has met all the requirements of Levels 1 and 2, the facility earns points for each indicator it meets, and points can be combined in any way, regardless of category. Level 3 is reached by earning a specified number of points, regardless of which points were earned. Level 4 is reached by earning a higher number of points. To see which indicators were required at Levels 1 and 2 and how many points were awarded for other indicators, refer to Table E2 and Table E3. Model 3 Rating Structure in Appendix E. Below are figures comparing the star levels earned by programs using the Parent Aware rating structure and using Model #3's rating structure.

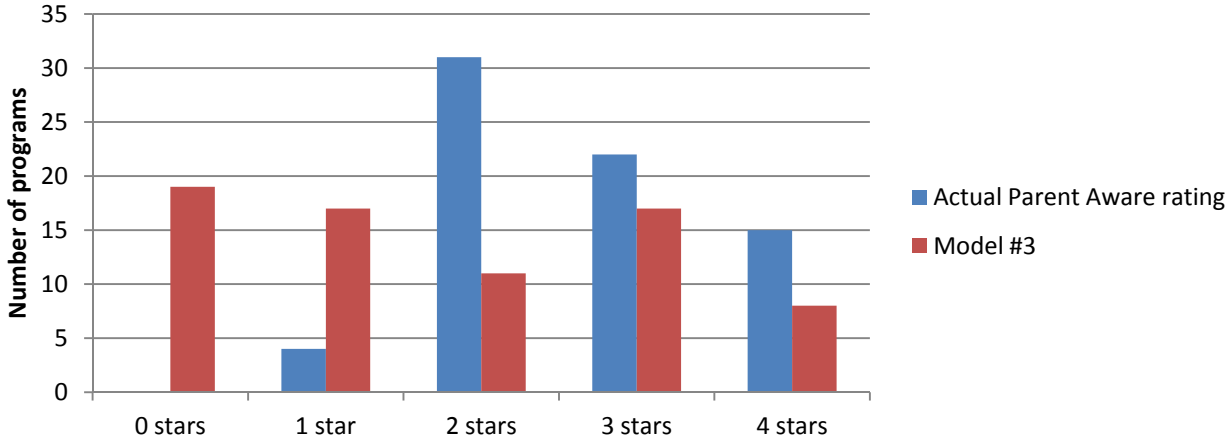
Model #3 is similar to Model #2 at levels 1 and 2. The two models differ primarily in the fact that, in Model #3, programs earn points to reach levels 3 and 4. However, there are several notable differences. One difference is that in Model #2, programs are required at Level 1 to use and be trained in a curriculum or approach that is demonstrably aligned with the Minnesota Early Childhood Indicators of Progress. In contrast, Model #3 has no requirement for curriculum use at level 1 or 2. We would expect this eased requirement to allow more programs to reach Level 1.

Table 58. Parent Aware points required at each level of Model #3

Model #3 Rating	Minimum Number of Parent Aware points that could earn the Model #3 star level
1-star	5 points
2-stars	8 points for centers and 9 points for family child care
3-stars	18 points for centers and 22 points for family child care
4-stars	30 points for centers, and 34 points for family child care

As shown in Table 58, a second key difference between Model #2 and Model #3 is that in Model #3, the minimum number of points required at all four levels is lower than the minimum number of points required for each level of Parent Aware (with the exception of family child care providers at level 4). This makes it possible for a program to receive a higher star rating in Model #3 than they received in Parent Aware.

Figure 27. Star levels of 72 Center-based programs in Parent Aware compared to star levels in Model #3

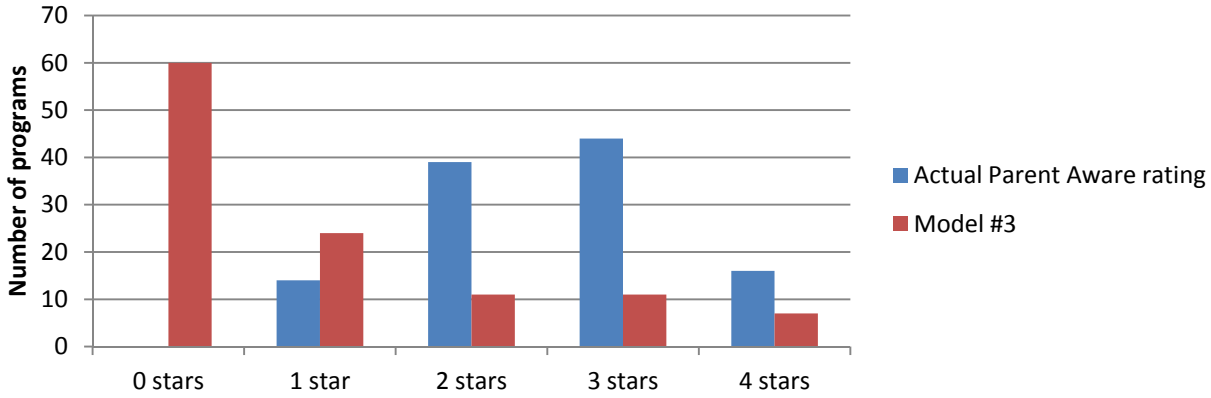


Center-based programs scored significantly lower in Model #3 than they did in their actual Parent Aware rating ($p<.001$), but significantly higher than they scored in Model #2 ($p<.001$).

- Over a quarter (26%) of all centers were not able to meet all the requirements needed to earn 1-star in Model #3. The most common reasons for a center not earning at least 1-star were that:
  - The program's lead teachers had not all joined the PD registry (a problem for 14 of 19 programs).
  - The program cannot document tracking children's progress for all ages served (a problem for 9 of 19 programs).
- Nearly a quarter (24%) of all centers received a rating of 1 star in Model #3. The most common reasons for a center to reach 1 star but not move on to 2 stars were that:
  - The program's lead teachers did not all have professional development plans (a problem for 8 of 17 programs).
  - The program cannot document sharing assessment information with children's families at least twice a year for all ages served (a problem for 7 of 17 programs).

- Among center-based programs that met all the requirements for 2 stars, 69% earned at least 10 additional points in order to achieve 3 or more stars. The result is that relatively few center-based programs are given a 2-star rating in Model #3.
- A small number of center-based programs (7%) received a higher star rating in Model #3 than in their Parent Aware rating.

Figure 28. Star levels of 113 Family Child Care providers in Parent Aware compared to star levels in Model #3



Family child care providers scored significantly lower in Model #3 than they did in their actual Parent Aware rating ($p<.001$), but significantly higher than they scored in Model #2 ($p<.01$).

- Over half of family child care providers (53%) were not able to meet all the requirements needed to earn 1-star in Model #3. The most common reasons for a family child care provider not earning at least 1-star were that:
  - The program cannot document tracking children's progress for all ages served (a problem for 43 of 60 programs).
  - The program's lead teachers had not all joined the PD registry (a problem for 25 of 60 programs).
- Approximately one-fifth (21%) of all family child care providers received a rating of 1-star in Model #3. The most common reasons for a provider to reach 1-star but not move on to 2-stars were that:
  - The provider did not have a professional development plan (a problem for 9 of 24 providers).
  - The provider does not conduct intake interviews (a problem for 9 of 24 providers)
  - The provider cannot document sharing assessment information with children's families at least twice a year for all ages served (a problem for 7 of 24 providers).
- Only one family child care provider received a higher star rating in Model #3 than in their Parent Aware rating.

How well does Model #3 differentiate quality? When observational measures are a part of a hybrid or a points system, it is easier to use observational measures to validate how well the rating structure is differentiating quality than it is for a building block rating system. While an ERS score of at least 3.0 is required to move beyond 2-stars, a program could earn enough points

to achieve a 4-star rating without scoring any higher than 3.0 on the ERS. The fact that a higher score on the ERS and CLASS is not rewarded at all until star level 3 means that any differences seen between the ERS scores and CLASS scores of programs with zero stars, 1-star, or 2-stars can be seen as an indication that the rating structure is capturing some observable difference in quality between those levels. In Figure 29 and Table 59, we see that there is a significant difference in observed environmental quality between center-based programs with zero stars and center-based programs with 1-star on the ECERS-R and FCCERS-R, though not on the ITERS-R. Surprisingly, however, programs with 2-stars are scoring significantly lower than programs with 1 star on all three ERS scales. This pattern is not explained by the requirements of the rating model.

Figure 29. Average ECERS-R, ITERS-R, and FCCERS-R Scores by Model #3 star levels

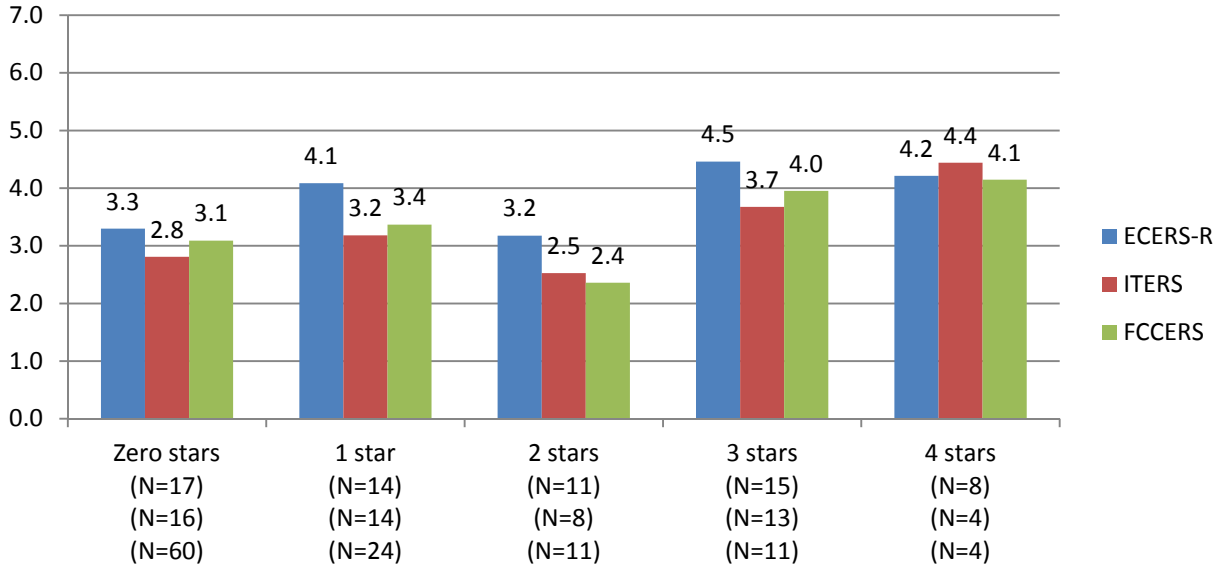


Table 59. Significance of patterns in ERS scores across star levels in Model #3

	ECERS-R	ITERS-R	FCCERS-R
Overall significance of trend	F(4,64)=8.37, p<.0001	F(4, 54)=7.25, p<.0001	F(4, 112)=11.93, p<.0001
Zero stars vs. 1-star	p<.01		p<.05
Zero stars vs. 2-stars			p<.001, unexpected direction
Zero stars vs. 3-stars	p<.0001	p<.01	p<.0001
Zero stars vs. 4-stars	p<.01	p<.01	p<.0001
1-star vs. 2-stars	p<.01, unexpected direction	p<.05, unexpected direction	p<.0001, unexpected direction
1-star vs. 3-stars		p<.05	p<.05
1-star vs. 4-stars		p<.01	p<.01
2-stars vs. 3-stars	p<.0001	p<.0001	p<.0001
2-stars vs. 4-stars	p<.01	p<.01	p<.0001
3-stars vs. 4-stars		p<.05	

When 3- and 4-star programs are combined into one group and compared to the group of programs with zero, 1- or 2-stars, the higher-rated programs significantly outscore the lower-rated programs on all three ERS scales ($p<.0001$ for all three). The requirement that programs have an average ERS score of at least 3.0 in order to reach 3- or 4-stars is likely the primary driver of this difference. These findings provide mixed evidence for the hypothesis that this model effectively differentiates levels of quality.

Figure 30 and Table 60 show that in Model #3 there is no significant overall pattern of differences by level for the Emotional Support subscale or the Instructional Support subscale. There is, however, a significant pattern by level for scores on the Classroom Organization subscale. This pattern may be partially attributable to the points earned for higher CLASS scores in Model #3. However, Model #3 does not require any particular CLASS score at any star level, so this is not likely to be a big driver of the differences by star level.

Figure 30. Average CLASS subscale scores by Model #3 star levels

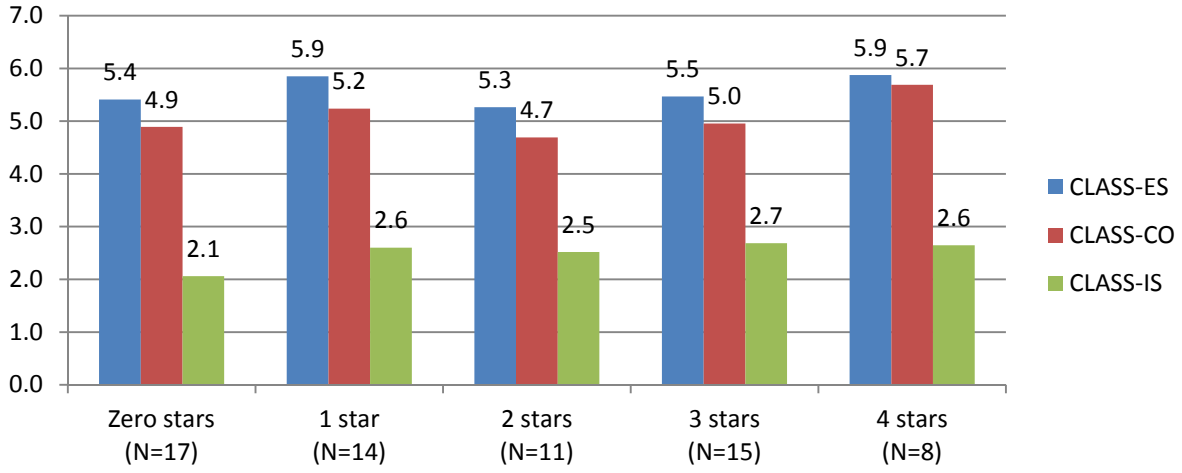


Table 60. Significance of patterns in CLASS scores across star levels in Model #3

	Emotional Support	Classroom Organization	Instructional Support
Overall significance of trend	F(4, 64)=1.82, p>.05 Not significant	F(4, 64)=2.72, p<.05	F(4, 64)=2.05, p>.05 Not significant
Zero stars vs. 1-star			
Zero stars vs. 2-stars			
Zero stars vs. 3-stars			
Zero stars vs. 4-stars		p<.05	
1-star vs. 2-stars		p<.05, unexpected direction	
1-star vs. 3-stars			
1-star vs. 4-stars		p<.05	
2-stars vs. 3-stars		p<.05	
2-stars vs. 4-stars		p<.01	
3-stars vs. 4-stars		p<.05	

Across both ERS and CLASS scores, there is an intriguing pattern of significantly lower scores for programs with 2-stars than for programs with 1-star. This was true for all three of the ERS scales and for the Classroom Organization subscale of the CLASS. The pattern was even more pronounced for the FCCERS-R, where programs with 2-stars also scored significantly lower than programs with zero stars. These findings do not provide evidence that Model #3 is able to effectively distinguish levels of quality.

Another way to evaluate how well a rating system differentiates quality is to examine how much children improve over the course of a year in programs of varying star levels. We therefore examined the differences in child gains by star level using multilevel modeling.[24] Again, we included all ratings associated with child data. We found that:

- Children in 4-star programs made significantly greater gains on the Woodcock-Johnson Applied Problems than children in 2-star programs ($p < .05$). However, there was not a linear increasing trend across star levels.
- Children in zero-star programs made significantly higher gains on the SCBE-30 Social Competency measure than children in 4-star programs ($p<.05$, finding not in the expected direction).
- Children in 4-star programs had significantly greater decreases in SCBE-30 Anger-Aggression than children in zero- and 3-star programs ($p < .05$, this finding is in the expected direction, as a decrease in this measure is desirable).
- Children in 4-star programs had significantly greater decreases in SCBE-30 Anxiety-Withdrawal than children in 3-star programs ($p < .05$, this finding is in the expected direction, as a decrease in this measure is desirable).

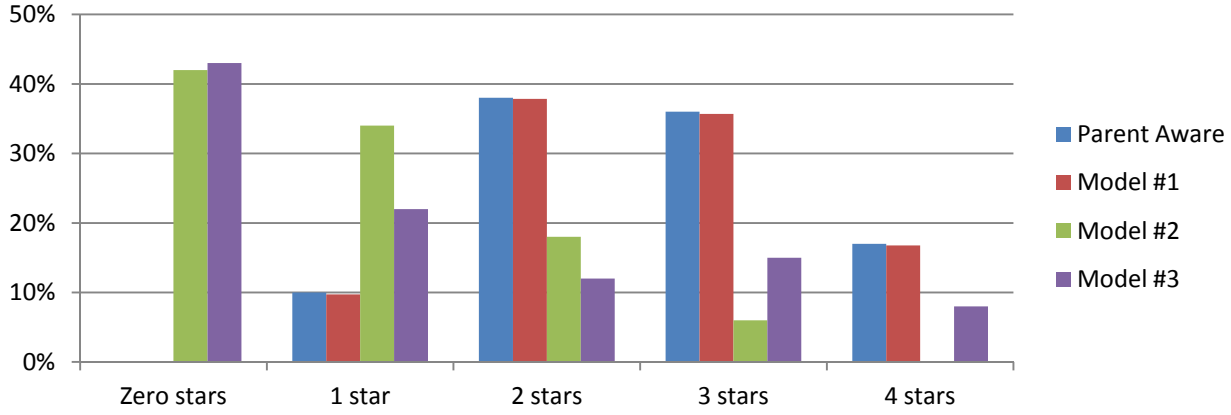
These findings do not provide evidence for an effect of star level on child outcomes. Where significant differences were found, the pattern does not follow a linear pattern across star levels. In some cases, the pattern is directly contrary to what would be desired. Because of these mixed results, we cannot draw any conclusions from this analysis about the effectiveness of the model in differentiating quality.

Summary of Alternative Models

As can be seen in Figure 31, programs score lowest in a building blocks system, more highly in a hybrid system, and most highly in the current Parent Aware rating system, which is a points system. This pattern is expected based on what is seen across multiple QRIS nationwide.

[24] The following approach was used in these analyses: For each child outcome (change score), the first model was run with star rating levels as predictors and all child and family characteristics as covariates. The first model was then checked to see which covariates were significant. A second model was run which included all four quality category predictors as well as household income, mother's education, and any other covariates that were significant in the first model. Child and family characteristics considered were: Household income, mother's highest level of education, father's highest level of education, race/ethnicity (White, Black, Asian, Native American/Pacific Islander, Hispanic, African, other), marital status (married, single, living with partner, separated, divorced/widowed), home language, and immigrant status. For more details, see Section 6 on Child Outcomes.

Figure 31. Distribution of ratings across levels, in three rating systems



There is more evidence for the effectiveness of Model #2 in differentiating levels of quality than for Model #3.[25] Under Model #2, there is a significant pattern of higher star levels corresponding to higher observed quality, as measured by all three versions of the Environment Rating Scales and two of the three subscales of the CLASS. This pattern is usually linear in the expected direction, with some exceptions at the lower levels of quality. It is more difficult to find an effect of star level on child outcomes than on observed measures of quality. However, the star levels resulting from Model #2 do correspond to some differences in child outcomes. These findings provide promising but not conclusive evidence to support the ability of Model #2 to differentiate between meaningful levels of quality.

Under Model #3, the findings are more mixed and little can be determined about the effectiveness of the model in differentiating quality, either through observational measures of quality or through child outcomes.

Of the 185 programs included in this analysis, three center-based programs and five family child care providers scored both 3 stars in Model #2 (the highest level earned) and 4 stars in Model #3. We consider these programs to be "highest achievers." In addition to those eight programs, there are also six center-based programs and two family child care providers that scored the highest level in one model and the second-highest level in the other model. We consider these programs to be "high achievers."

Table 61. Scores for "highest achievers" and "high achievers," compared to all other programs

	Highest achievers (N=8)	High achievers (N=8)	All other programs (N=169)
Family Partnerships points	10	9.9	8.3
Teaching Materials and Strategies Points	8.2	6.3	4.3
Tracking Learning Points	9.1	9.3	4.9
Teacher Training and Education Points	8.9	9.0	4.9
Average ERS score	4.5	3.9	3.3

[25] To read more about the effectiveness of the Parent Aware rating system, refer to Section 6.

The pattern of difference is found to be significant (using an F test) across all four categories and for average ERS score. However, the difference between "Highest achievers" and "High achievers" is only significant for the Teaching Materials and Strategies category and for average ERS score ($p<.01$ and $p<.05$, respectively).

Recommendations

- Scores on observational measures of quality are not significantly impacting ratings, nor are strong linkages detected between the measures and child outcomes. Consider increasing the weight of these measures in the rating structure if they are a key quality standard. Examine how these measures are conducted within programs to identify any possible threats to their validity.

- Currently, most Parent Aware programs are rated at the highest level of quality. Evaluate the results of the new hybrid system (proposed in the Race to the Top application to be used in statewide expansion of Parent Aware) and its effectiveness in creating a broader distribution of programs across the star levels.

Section 9. Summary and Recommendations

The Year 4 Evaluation Report provides an update on the status of Parent Aware implementation in the final year of the pilot. The report describes contextual factors, Parent Aware participation rates, ratings issued, and characteristics of programs in Parent Aware. The report pays special attention to the outcomes of the re-rating process for programs and the quality improvement supports that are provided. Finally, the report includes an examination of parents of children in Parent Aware-rated programs and their knowledge and perceptions of child care and their child care choices. In addition, the report addresses the issue of validation by examining how well the Parent Aware quality levels are distinguishing measures of observed quality as well as children's developmental gains across a range of developmental measures. The report also examines alternative models for Parent Aware and compares the effectiveness of various structures for the Rating Tool. This section of the report extracts a summary of key findings from the evaluation and builds on the findings with recommendations for statewide expansion.

Summary

Participation in Parent Aware increased steadily across the years of the pilot.

As of June, 2011, 388 programs had *current* Parent Aware ratings. Family child care is the fastest growing program type in Parent Aware. At the end of the pilot, 91 family child care programs had full ratings compared to 53 child care centers.

Nearly 30% of eligible programs in the pilot areas enrolled in Parent Aware.

Overall, about 28% of eligible center-based, family child care, and Head Start programs in the pilot areas were participating in Parent Aware as of June, 2011. This penetration rate is in the mid-range of other voluntary QRIS nationally. The density of participation is greater in the urban and suburban pilot areas and is greater among center-based programs.

Nearly 24,000 children are being served by Parent Aware programs.

The majority of these children are preschoolers served primarily in school-based, Head-Start, and accredited center-based programs. Over one-third of these children are estimated to receive CCAP and 16% are estimated to be English Language learners.

The majority of programs in Parent Aware have earned the highest rating.

Nearly two-thirds (63%) of Parent Aware-rated programs are automatically-rated 4-star programs. Of the programs that have a full Parent Aware rating as of June, 2011, 82% received 3- or 4-stars, 15% received 2-stars, and 3% received a 1-star rating.

Programs improve their star level when they receive an annual re-rating.

Sixty percent of centers and 70% of family child care providers improved their rating by at least one star from their initial rating to their second rating. Family child care providers are more likely than center-based providers to improve their star level. Programs that gain one or more star levels tend to earn higher numbers of points in the Tracking Learning category than in other categories.

When they are re-rated, programs make small but significant gains on measures of observed quality. These gains are about 1/3rd of a point on ratings of global quality (ERS) and classroom organization and ½ of a point on emotional support. Programs do not make significant gains, however, on observed measures of instructional support.

Fully-rated programs receive multiple quality improvement supports through Parent Aware.

Provider Resource Specialists facilitate the rating process for all programs pursuing a full rating. They average 8.2 hours of direct contact over 3.6 visits (including time spent on-site and phone calls). Providers and their Resource Specialist report spending the most time together assembling the materials for the Parent Aware documentation packet.

ERS Consultants provide consultation to help programs prepare for (and improve) their score on the Environment Rating Scales. They average 13.75 hours of direct contact over 6.4 visits. Seventy-seven programs have received this support to date.

CLASS Coaches provide consultation to help center-based programs prepare for (and improve) their score on the CLASS. They average 23.2 hours of direct contact over 8.8 visits. Fewer programs (13) have received this support to date.

Providers report high satisfaction with Parent Aware quality improvement supports.

The majority of providers report that their Provider Resource Specialist and ERS Consultant are very or somewhat helpful. Providers also report that the provision of free training, quality improvement support dollars, and free curriculum materials were beneficial to their program.

Providers report that Parent Aware has helped them improve the quality of their program.

Providers report that Parent Aware has been beneficial to their program and that the rating they received accurately reflects the quality of their program.

Providers do not yet feel that families are choosing their program because of Parent Aware.

Providers are likely to talk to families in their program about Parent Aware. However, most report that families disagree or are neutral about the likelihood families choosing their program because the provider has enrolled in Parent Aware.

Parent recognition of "Parent Aware" has increased over the pilot.

Thirty-four percent of parents with children in Parent Aware-rated programs had heard of Parent Aware in the fall of 2010. This is an increase from 25% in 2009 and 20% in 2008.

A measure of parent satisfaction with their early care and education program did not distinguish between programs of different star levels.

Parents value multiple dimensions of early care and education settings and report that they see these dimensions in the program they are using for their preschool child. Research is needed to identify measures that better tap into parents' perceptions of quality and satisfaction with their early care and education arrangement so that they can be used in future QRIS evaluations.

Measures of observed quality in Parent Aware programs indicate that quality improvements are needed, particularly on dimensions of global quality and instructional support.

The majority of ERS scores were in the "minimal" quality range, and some were in the "inadequate" quality range. CLASS scores were in the middle range for Emotional Support and Classroom Organization but in the low range for Instructional support.

There is limited evidence to suggest that the Parent Aware Rating Tool is distinguishing levels of observed quality effectively.

Across observational measures, there was little evidence for a linear trend across 2-star, 3-star, and 4-star fully-rated programs. This finding indicates that further work is needed to strengthen the indicators and the construction of quality levels in Parent Aware. This work has been initiated already through the Race to the Top Early Learning Challenge application process.

Across Parent Aware-rated programs, children make significant developmental gains from the fall to spring on assessments aligned with key indicators of school readiness.

Children make gains on measures of expressive and receptive vocabulary, early literacy skills, math skills, social competence and persistence. There is reason for concern however, about a teacher-reported *increase* from fall to spring on a measure of children's angry-aggressive behavior. Low-income children show the same pattern as the overall sample, and the effect sizes for measures of language and literacy gains are in the medium range. This finding does not imply that Parent Aware is the cause of positive or negative changes in children's outcomes. It does

imply, however, that among the programs participating in Parent Aware – which includes primarily programs with automatic 4-star ratings – children are making mostly positive gains in the developmental domains that are important for school readiness.

No clear linkages could be detected between children's developmental gains and Parent Aware quality levels or other aspects of program quality.

Looking across the results of multiple analytic models, it is difficult to detect a clear pattern of linkages between various measures of quality and children's developmental outcomes. An analysis mapping the findings by developmental domain provides an emerging picture of quality measures being slightly more predictive in expected ways of children's early math outcomes and to a lesser extent, language and literacy outcomes, when linkages were found. Linkages between quality measures and social-emotional outcomes and approaches to learning, when found, were consistently in an unexpected direction.

Next Steps and Recommendations

A number of successes were clear in the pilot that can be built on to support the next phase of statewide expansion of Parent Aware.

- Program enrollment grew throughout the pilot, even in the final year when the future of Parent Aware was unclear.
- The provision of quality improvement supports was aligned with the quality indicators and was linked with significant program improvements on the rating scale at the second rating.
- Overall supports for providers (including technical assistance for quality improvement) are perceived positively by providers, and providers report increasing their focus on quality as a result of their participation in Parent Aware.
- Parent recognition of the Parent Aware program (among parents with children in Parent Aware-rated programs) increased each year of the pilot.
- Children in Parent Aware-rated programs make positive gains in the developmental domains that are important for school-readiness.

Recommendations for applying these and other key findings of the Evaluation are included within each section of this report and summarized below.

- Continue using systematic strategies for tracking and recording details about the context of Parent Aware and the related quality improvement efforts that emerge in either a parallel or coordinated way to support Parent Aware. These details will be important for documenting the impact of Parent Aware over time.

- The distribution of programs in Parent Aware is heavily weighted toward the upper end of the rating scale. Consider strategies to recruit programs at lower quality levels to increase the diversity of programs included in Parent Aware.

- The density of program participation (calculated as the percentage of eligible programs that have enrolled in Parent Aware) is in the middle range of participation rates seen nationwide in voluntary QRIS. Develop incentives and supports to encourage greater participation across center-based programs and family child care programs.

- Continue to diversify the programs that are enrolled in Parent Aware. Targeted support strategies such as those that were evaluated in the Getting Ready program and that were aimed at recruiting family child care providers and programs serving children who are English Language Learners can be successful in facilitating recruitment of programs serving a higher percentage of children with particular risk factors.

- Automate the process for gathering data on the characteristics of children served in Parent Aware-rated programs. These statistics are included in performance measures proposed for Race to the Top and in new reporting requirements for the federal Child Care and Development Fund program and will need to be tracked on a regular basis.

- Build on the positive impressions of programs in Parent Aware by developing new marketing materials that share these impressions with potential enrollees. Consider developing peer-to-peer mentoring so that programs can contact another program when they have questions or concerns (in addition to contacting Parent Aware staff).

- Address programs' concerns about the observational component of the rating process. Consult with other state QRIS about strategies used to facilitate the observational process so that it is constructive and supportive for programs.

- Continue developing strategies to help programs engage and inform families about their participation in Parent Aware. Outreach materials can be developed for families already enrolled as well as prospective families who are visiting the program or looking online for information.

- Collect data from programs that chose not to pursue a second rating in Parent Aware to learn more about the reasons for exiting the program. Use the data to inform strategies for improved retention.

- Continue to support quality improvement while recognizing that the gains programs are making on Parent Aware ratings are not accompanied by proportionate gains on observational measures of quality. This discrepancy indicates a need to continue evaluating the weighting scheme for observational measures in the rating tool and the role they should play in determining the final rating.

- Develop processes for entering data and tracking services provided by the technical assistance staff on a regular basis. The method used for the Evaluation required staff to review records and submit data after they had worked with providers. It would be more accurate to collect these data in real time so that they could be used for regular tracking and performance management.

- Address the minimal quality levels observed in Parent Aware programs by supporting quality improvement strategies aimed at critical practices such as support for instructional practices and enhanced global quality.

- Continue to track observed quality scores and how they relate to the rating levels designated by the revised Parent Aware rating tool to be used in the next phase of statewide expansion.

- Continue to weigh options for strengthening the measurement of quality in Parent Aware, either through the inclusion of alternative quality measures or through procedures that tighten the conditions under which quality scores are obtained (for example, clarifying the classroom activities that can be used for scoring the CLASS and strengthening reliability standards).

- Use the findings from the analysis of children's developmental gains to inform professional development for teaching staff and family child care providers. For example, findings indicate that children are not making strong gains on some pre-math skills in the year before Kindergarten. Similarly, children are rated by their teachers and family child care providers as having increased issues with oppositional behavior and frustration tolerance across the school year. These findings represent important opportunities to provide support for teachers and family child care providers working with young children on these critical school readiness skills.

- Continue to prioritize marketing and outreach efforts that intentionally target families with young children and are designed to support their decision-making.

- Continue to prioritize data collection from children with diverse characteristics. If feasible, include systematic data collection from children as part of the program requirements for enrolling in Parent Aware to ensure a more representative sample of children in the Evaluation.

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Appendix A: DETAILS ABOUT PARENT AWARE

Details about Parent Aware

Across the nation, Quality Rating and Improvement Systems (QRIS) are a strategy being used by states to identify and promote quality improvement in early childhood and school-age programs by establishing standards of quality for programs; offering resources, incentives and assistance to programs to meet and maintain higher levels of quality; and informing parents about the quality of early care and education options. The first QRIS was launched in Oklahoma over a decade ago (1998) and since then, at least 30 additional states and local areas have developed a statewide or a pilot QRIS. Many of the remaining states and territories are in a planning phase or are considering development of a QRIS.

A comprehensive volume outlining the components of QRIS and the variations that exist across different state and local systems was released in 2010 by the Office of Planning, Research and Evaluation in the U.S. Department of Health and Human Services (see Tout, Starr, Soli, Moodie, Kirby & Boller, 2010b). The *Compendium of Quality Rating Systems and Evaluations* is a helpful resource for readers who would like the opportunity to learn more about QRIS and to compare components of Minnesota's pilot to other QRIS nationally. In this appendix, we offer a brief overview of QRIS structure and details about Parent Aware, Minnesota's pilot QRIS.

QRIS are distinguished by five common components. While the details of these components vary considerably between different systems, the core purpose of the components is similar. As described in various publications (Child Care Bureau, 2007; Mitchell, 2005; Tout et al., 2010b; Zellman & Perlman, 2008), they each contain:

- **Quality standards** that provide the basis for a program's rating. Standards are usually articulated for: professional development, education or training of the administrators and teachers/caregivers; the learning environment; and parent/family involvement.
- A process for **rating and monitoring** program quality. A QRIS uses a variety of tools to rate and monitor quality including observation, document review, and self report. It also sets guidelines for the frequency of program assessments and uses methods to ensure integrity of the assessment process.
- A process for supporting programs in **quality improvement**. A QRIS either provides staff and other resources to assist with improvement efforts or it provides a connection to quality improvement services provided by another organization.
- **Financial incentives** to promote participation in a QRIS. These incentives include tiered reimbursement, grants, scholarships and awards for programs meeting certain requirements.
- **Dissemination of ratings** to parents and other consumers. A QRIS uses websites and other materials to inform parents about the quality levels and provides information about the quality of individual programs.

Below, we use this five-part rubric to describe the details of Parent Aware. Before describing these details, however, it is important to describe the three different pathways that programs could take in the pilot to achieve a Parent Aware rating. Further details about these ratings can

be found in the Parent Aware Manual (produced and updated by the Department of Human Services).

Full Rating. Licensed child care centers, preschools and family child care programs that are not accredited can apply for a full rating in Parent Aware. Documentation is required for each of the Parent Aware quality standards, an on-site observation is conducted, and curriculum and assessment tools must be approved by the Department of Human Services. A rating of 1 to 4 stars is possible in the full rating pathway.

Automatic Rating. Programs (child care centers, preschools and family child care programs) accredited by an approved accredited body, Head Start/Early Head Start programs that are in compliance with the Program Review Instrument for Systems Monitoring (PRISM), and School Readiness programs[26] can apply for an automatic 4-star rating in Parent Aware (as of July 1, 2009).

Provisional Rating. In the initial two years of the pilot, programs that were not accredited and did not have a full Parent Aware rating could apply for a provisional rating of 3 stars. Authority for the provisional ratings was included in legislation passed in 2007 establishing the Pre-Kindergarten Exploratory Allowance project (the "State-funded Pre-Kindergarten Allowances"). Parent Aware programs with a 3- or 4-star rating and programs with provisional ratings (3-stars) were eligible to receive the State-funded Allowances through June 30, 2009. Child care centers, preschools, and family child care programs could apply for a Parent Aware provisional rating designated by the Department of Human Services. School Readiness could apply for provisional approval from the Minnesota Department of Education (this option has now ended as School Readiness programs are eligible for an automatic 4-star rating). Beginning July 1, 2009, programs that already have a provisional rating had the option to extend their rating *if* they were pursuing a Parent-Aware approved accreditation. Programs enrolling in Parent Aware after July 1, 2009 had the option to apply for a provisional rating if they are pursuing a Parent-Aware approved accreditation. If the program was not pursing accreditation, they must be participating in the full rating process in Parent Aware within six months. Programs with a provisional rating status have a 3-star rating on the Parent Aware website which is denoted in green to distinguish it from the full ratings and automatic 4-star ratings in yellow.

Quality Standards

Programs applying for a full Parent Aware rating must first establish their eligibility for a rating by meeting basic requirements. These include signing a commitment to participate, attending an orientation session, verifying that they are licensed and have a positive licensing history over the past two years (with no negative licensing actions, maltreatment determinations, or operations under a conditional license), submitting a program philosophy statement, and completing a health and safety checklist. Once these requirements are met, the following four areas are rated (with details about the indicators examined in each area):

[26] School Readiness programs are school-based pre-kindergarten programs administered by school districts.

Family Partnerships. Indicators in this area examine whether a program has a formal process for collecting and using feedback from parents; the strategies used for regular communication with families as well as communication about particular milestones (for example, transitioning to kindergarten); whether a program has an intake interview; whether programs provide information about preschool screening; and whether individual plans are used to help with transitions and other milestones.

Teaching Materials and Strategies. Indicators in this area examine whether the curriculum used is research-based and whether an effective learning environment and child-adult interactions are promoted. A select set of curricula have been pre-approved by Parent Aware. Other curricula must be reviewed and approved by the Curriculum Review Committee (described below). The learning environment and interactions are assessed through on-site observation with nationally-recognized tools (described below).

Tracking Learning. Indicators in this area examine whether the program uses a research-based instructional assessment tool to observe and monitor children's progress and if so, whether that information is shared with parents and used to guide instruction and design individual goals for the child. A select set of assessment tools have been pre-approved by Parent Aware. Other assessment tools must be reviewed and approved by the Child Assessment Review Committee (described below).

Teacher Training and Education. Indicators in this area examine the qualifications of administrators, teachers, or family child care providers; the degree to which credentials or degrees have been attained or specialized training has been completed; and, whether the teachers/family child care providers have a professional development plan. Connections are made between the indicators in this domain and some of the foundational elements of Minnesota's professional development system for early care and education and school-age programs. For example, programs are expected to enter information into the Minnesota Center for Professional Development (MNCPD) Registry and to categorize their previous training using the categories described in Minnesota's Core Competencies (note that this linkage was a change in the indicators instituted after the MNCPD Registry became operational in the summer of 2008).

Points are awarded in each of the quality categories and ratings of one to four stars are assigned based on the number of points received.

Rating and Monitoring

Parent Aware uses a combination of strategies to review, analyze, and rate programs on the quality standards described above. Program practices in the four quality standards are established through program documentation, observation by trained researchers, and review of materials by an expert panel (if applicable). At the orientation to the program, providers receive a quality documentation packet that contains all of the relevant forms and explanation of procedures. The following procedures are of particular importance in the rating process:

On-site Observation – To complete the requirements of the Teaching Materials and Strategies category, programs must participate in an on-site observation conducted by trained observers from the Assessment and Training Center in the Center for Early Education and Development (CEED) at the University of Minnesota. In family child care programs, observers use the Family Child Care Environment Rating Scale – Revised (FCCERS-R; Harms, Cryer & Clifford, 2007) to assess the quality of the environment, materials, routines, health and safety and interactions. In center-based programs with preschool classrooms (serving children ages 3 to 5), observers complete the Early Childhood Environment Rating Scale – Revised (ECERS-R; Harms, Clifford & Cryer, 1998) or the Infant and Toddler Environment Rating Scale Revised (ITERS-R; Harms, Cryer & Clifford, 1990) depending on the ages of children in the selected classroom (one-third of the classrooms serving each age group are randomly selected for observation). They also complete the Classroom Assessment and Scoring System (CLASS; Pianta, La Paro & Hamre, 2008) to assess the quality of emotional support and instruction.

Review of Curricula – If a program is not using a pre-approved curriculum, documentation about the curriculum must be reviewed and approved by the Department of Human Services based on recommendations from the Curriculum Review Committee. The Curriculum Review Committee is comprised of up to six experts in early childhood education who apply for the position and are appointed by the Department of Human Services (DHS) and the Department of Education (MDE). Committee members must have at least a Bachelor's degree in Early Childhood Education (or a related field) and must have at least five years of experience in teaching, training, or research in early childhood education, curriculum and instruction, child assessment or a related area. Up to four representatives from DHS or MDE may participate in the Committee. Programs can nominate existing curricula for review by the Committee or they can submit written documentation about a curriculum that they have developed themselves. The Committee meets as needed and will end its term at the end of the Parent Aware pilot. To be approved, written curriculum and any associated manuals or instructions for use must address a number of criteria and show how it is aligned with the Minnesota Early Childhood Indicators of Progress (ECIPS).

Review of Assessment Tools – If a program is not using an assessment tool already included on the approved assessments list, the assessment tool used must be approved by DHS based on recommendations from the Child Assessment Review Committee. The process for appointing members to the Child Assessment Review Committee is the same as the process used for the Curriculum Review Committee (described above). In addition to other specific, defined criteria that are reviewed by the Committee, they assess the extent to which the assessment tool is aligned with the ECIPS.

Accredited programs that complete a short application, submit proof of their accreditation status and demonstrate their compliance with the licensing requirements described above automatically receive a 4-star rating. Their rating process does not involve a review of curriculum and assessment, nor does it involve an on-site observational visit. Parent Aware accepts accreditation from the following bodies: National Association for Family Child Care,

National Association for the Education of Young Children, Council on Accreditation, National Early Childhood Program Accreditation, American Montessori Society, and the Association of Montessori International-USA. These accrediting bodies were selected for Parent Aware because they are also used to document eligibility for tiered reimbursement in Minnesota's Child Care Assistance Program. To increase the number of high quality programs in Parent Aware, the decision was made to allow accredited programs throughout the entire Twin Cities seven-county metropolitan area to participate.

Similarly, Head Start programs that are in compliance with the Program Review Instrument for Systems Monitoring (PRISM) will automatically receive a 4-star rating a after submitting an "intent to participate" form to the Minnesota Department of Education (MDE). Beginning July 1, 2009, School Readiness programs also receive a 4-star automatically if they submit evidence to MDE documenting their compliance with the indicators. For items that are included in the statutorily required (Minnesota Statute 124.D.15) School Readiness Plan, the district must submit assurance that district sites are in compliance with the Plan. For items that are not required in statute, the program must submit evidence to MDE that the indicator is being met.

Licensed child care centers and family child care programs that are interested in participating in Parent Aware quickly to accommodate families that would like to use the State-funded Pre-Kindergarten Allowances or the MELF-funded Saint Paul Early Childhood Scholarship in their program could apply for a temporary Provisional Rating (an option available through the end of June, 2009 as described above). The Provisional Rating involves documentation of the quality standards in the Family Partnership category (all indicators described above), Teaching Materials and Strategies category (reporting the use of an approved research-based curriculum and training on the curriculum), and Tracking Learning category (reporting the use of an approved research-based assessment tool and training on the assessment tool). In addition, programs must operate for a minimum of 12 hours per week. Information is not collected about Teacher Training and Education and on-site observations are not conducted. MELF made a policy decision that a provisional rating is equivalent, in practice, to a rating of 3 stars generated through the full rating process.

Quality Improvement

When programs apply for a full rating in Parent Aware, they are paired with a Provider Resource Specialist who assists them in the rating process. The Resource Specialist also helps the program initiate a quality improvement process (note that provisionally-rated programs and programs with a 4-star rating are not eligible for improvement supports). This process is individualized and tailored to the needs of the program and includes the provision of financial resources as well as technical assistance. The Provider Resource Specialists are able to use the feedback reports generated from the on-site observations to inform their work with programs.

Financial Incentives

Programs receiving a rating of 3 or 4 stars or a provisional rating (equivalent to a rating of 3 stars) were eligible to serve children receiving State-funded Pre-Kindergarten Allowances of

up to $4,000 (available to low-income families in the Parent Aware pilot areas) or scholarships through the MELF-funded Saint Paul Early Childhood Scholarship (covering up to $13,000 annually for a select set of families living in District 6 and 7 within the Saint Paul pilot area). The effectiveness of these financial incentives for families and for programs is being evaluated in separate studies conducted by SRI International with support from the Minnesota Early Learning Foundation (see Gaylor et al., 2009a; Gaylor et al., 2009b; Gaylor et al., 2010). The State-funded Pre-Kindergarten Allowances ended on June 30, 2009.

Dissemination of Ratings

Quality ratings are publicized and shared with parents primarily through the Parent Aware website (www.parentawareratings.org). Options are provided for parents to read information in languages other than English or to speak directly with a referral specialist via a toll-free number.

The website was designed to include portals for parents and programs so that each group is able to access the information most relevant for them.

Parent Aware also provides marketing materials for programs that have been rated. Programs that have achieved a 4-star rating receive a banner, lawn sign, and a Parent Aware highest rating window cling (decal) to display their rating. They also receive a postcard shell and press release template if they want to undertake a mailing or press release. Programs with a 3-star rating receive a Parent Aware participant window cling and press release template. Programs with a 1- or 2-star rating receive a Parent Aware participant window cling.

Appendix B: CORRELATIONS FOR CENTER-BASED PROGRAMS

Table B1. Correlations among Parent Aware Indicators for 72 initial ratings of Center-based programs (* indicates that correlation is significant at p<.05) (table continues through top of page 139)

	Collects feedback from families	A written plan is developed for using parent feedback	Family Communication Strategies (3 points for 4 strategies)	Conducting an intake interview with parents	Refers parents to preschool screenings	Creates transition plans for children	Meets with parents about transitions	Uses a Research-based Curriculum for Infants/Toddlers	Uses a Research-based Curriculum for Preschoolers	ECERS-R Score	ITERS Score	CLASS - Emotional Support subscale score
Collects feedback from families	1											
A written plan is developed for using parent feedback	0.5483*	1										
Family Communication Strategies (3 points for 4 strategies)	0.5732*	0.2835*	1									
Conducting an intake interview with parents	0.169	0.3219*	0.1847	1								
Refers parents to preschool screenings	0.3877*	0.6764*	0.4551*	0.3128*	1							
Creates transition plans for children	0.3525*	0.1495	0.2248	0.1646	0.0687	1						
Meets with parents about transitions	0.2855*	0.3098*	0.2384*	0.2788*	0.1881	0.5598*	1					
Uses a Research-based Curriculum for Infants/Toddlers	0.1382	0.2049	0.0999	0.0736	0.1159	0.1759	0.0413	1				
Uses a Research-based Curriculum for Preschoolers	0.2203	0.1792	0.1796	0.2584*	0.1968	0.1036	0.2838*	-0.3249*	1			
ECERS-R Score	0.061	0.1398	-0.0836	-0.1021	0.0922	0.1056	0.14	0.2267	0.2327	1		
ITERS Score	-0.0634	0.0958	-0.0648	0.1272	0.1015	0.2272	0.0682	0.2634	0.2353	0.4601*	1	
CLASS - Emotional Support subscale score	-0.0827	0.1067	-0.0019	-0.126	0.1469	-0.0163	-0.0605	-0.0339	0.0359	0.4031*	0.2091	1
CLASS - Classroom Organization subscale score	-0.0481	0.0923	-0.0025	0.038	0.1098	-0.0151	0.0257	-0.0189	0.0964	0.4356*	0.3822*	0.7846*
CLASS - Instructional Support subscale score	0.1358	0.1341	0.0713	0.0445	-0.0008	0.0185	0.2005	-0.0752	0.049	0.2995*	0.0479	0.2371

	Collects feedback from families	A written plan is developed for using parent feedback	Family Communication Strategies (3 points for 4 strategies)	Conducting an intake interview with parents	Refers parents to preschool screenings	Creates transition plans for children	Meets with parents about transitions	Uses a Research-based Curriculum for Infants/ Toddlers	Uses a Research-based Curriculum for Preschoolers	ECERS-R Score	ITERS Score	CLASS - Emotional Support subscale score
Uses Research-based Assessment tool with Infants/ Toddlers (I/T)	0.1864	0.1785	0.1566	0	0.0884	0.1397	-0.0765	0.7295*	-0.3012*	0.1443	0.4147*	-0.0568
Uses Research-based Assessment Tool with Preschoolers	0.217	0.1039	0.078	0.2255	0.1519	0.019	0.2213	-0.4095*	0.7094*	0.2710*	0.3204*	0.1629
Shares assessment results with families of I/T	0.1397	0.1502	0.1269	0.065	0.0794	0.1478	0.0513	0.6728*	-0.1707	0.1114	0.3216*	-0.0735
Shares assessment results with families of Pre	0.1703	0.0998	0.0756	0.2482*	0.173	0.1529	0.3275*	-0.3178*	0.5807*	0.2677*	0.3319*	0.2485*
Uses assessment information to guide instruction (I/T)	0.1351	0.2410*	0.1	0.0182	0.1666	0.0678	-0.0417	0.6723*	-0.1453	0.2374	0.2967*	0.0286
Uses assessment information to guide instruction (Pre)	0.1589	0.1297	0.1488	0.2126	0.196	0.2211	0.3413*	-0.2855*	0.6459*	0.3660*	0.3305*	0.2312
PD Plan	0.0655	-0.0081	0.199	0.1043	0.1553	0.0948	-0.0386	0.2328*	0.1861	0.0291	0.2424	0.1418
PD Registry Score	0.2	0.18	0.1419	-0.0423	0.1057	0.0928	-0.0693	0.2930*	0.0988	0.1769	0.2845*	0.0784

	CLASS - Classroom Organization subscale score	CLASS - Instructional Support subscale score	Uses Research-based Assessment Tool with Infants/Toddlers	Uses Research-based Assessment Tool with Preschoolers	Shares assessment results with families of Infants/ Toddlers	Shares assessment results with families of Preschoolers	Uses assessment information to guide instruction (I/T)	Uses assessment information to guide instruction (Preschool)	Education Coordinator has a BA	PD Plan	PD Registry
CLASS Classroom Organization sub-scale score	1										
CLASS Instructional Support sub-scale score	0.1902	1									
Uses Research-based Assessment tool with Infants/Toddlers	-0.086	-0.0434	1								
Uses Research-based Assessment Tool with Preschoolers	0.2549*	0.2985*	-0.3089*	1							
Shares assessment results with families of I/T	-0.0585	-0.0855	0.8847*	-0.1717	1						
Shares assessment results with families of Preschoolers	0.3501*	0.206	-0.2513*	0.9086*	-0.055	1					
Uses assessment information to guide instruction (I/T)	-0.0033	-0.0277	0.8842*	-0.1487	0.9244*	-0.0883	1				
Uses assessment information to guide instruction (Preschool)	0.3314*	0.1815	-0.2088	0.8308*	-0.0337	0.8953*	0.0049	1			
Educ Coordinator has a BA	0.0664	-0.0484	0.1794	0.1354	0.148	0.1659	0.1385	0.164	1		

PD Plan	0.0084	-0.064	0.2437*	-0.0645	0.1523	-0.0351	0.1596	-0.0832	0.3877*	1	
PD Registry Score	0.1163	0.0805	0.2307	0.2625*	0.2358*	0.2710*	0.2487*	0.2128	0.5130*	0.4916*	1

Table B2. Category totals correlated with overall star rating and observational scores (* indicates that correlation is significant at p<.05)

	Family Partnerships Category Total	Teaching Materials and Strategies Category Total	Tracking Learning Category Total	Teacher Training and Education Category Total	Total Points Earned	Star Rating	Average ERS Score (ECERS-R and/or ITERS)
Family Partnerships Category Total	1						
Teaching Materials and Strategies Category Total	0.4713*	1					
Tracking Learning Category Total	0.3342*	0.5764*	1				
Teacher Training and Education Category Total	0.2123	0.4918*	0.4898*	1			
Total Points Earned	0.5555*	0.7942*	0.8388*	0.7945*	1		
Star Rating	0.4133*	0.6965*	0.7862*	0.6137*	0.8475*	1	
Average ERS Score (ECERS-R and/or ITERS)	0.139	0.7161*	0.4601*	0.2985*	0.5242*	0.4269*	1

Overall star rating is significantly correlated with scores in all four categories, but is most highly correlated with the Tracking Learning category and the Teaching Materials and Strategies category.

Appendix C: CORRELATIONS FOR FAMILY CHILD CARE PROVIDERS

Table C1. Correlations among Parent Aware Indicators for 113 initial ratings of Family Child Care providers (* indicates that correlation is significant at p<.05) (table continues through page 142)

	Collects feedback from families	A written plan is developed for using parent feedback	Family Communication Strategies (3 points for 4 strategies)	Conducting an intake interview with parents	Refers parents to preschool screenings	Creates transition plans for children	Meets with parents about transitions	Uses a Research-based Curriculum for Infants/Toddlers	Uses a Research-based Curriculum for Preschoolers	Average FCCERS Score	Uses Research-based Assessment tool with Infants/Toddlers	Uses Research-based Assessment Tool with Preschoolers
Collects feedback from families	1											
A written plan is developed for using parent feedback	0.7211*	1										
Family Communication Strategies (3 points for 4 strategies)	0.3866*	0.3684*	1									
Conducting an intake interview with parents	0.2733*	0.2358*	0.1387	1								
Refers parents to preschool screenings	0.4876*	0.4262*	0.4826*	0.1979*	1							
Creates transition plans for children	0.2237*	0.3940*	0.2176*	0.4324*	0.2385*	1						
Meets with parents about transitions	0.2564*	0.3378*	0.2290*	0.4115*	0.181	0.8425*	1					

	Collects feedback from families	A written plan is developed for using parent feedback	Family Communication Strategies (3 points for 4 strategies)	Conducting an intake interview with parents	Refers parents to preschool screenings	Creates transition plans for children	Meets with parents about transitions	Uses a Research-based Curriculum for Infants/Toddlers	Uses a Research-based Curriculum for Preschoolers	Average FCCERS Score	Uses Research-based Assessment tool with Infants/Toddlers	Uses Research-based Assessment Tool with Preschoolers
Uses a Research-based Curriculum for Infants/Toddlers	0.2052*	0.1999*	0.3470*	-0.0009	0.3408*	0.0519	0.1042	1				
Uses a Research-based Curriculum for Preschoolers	0.2588*	0.3614*	0.2962*	-0.0285	0.3685*	0.2447*	0.2363*	0.4174*	1			
Average FCCERS Score	-0.0812	0.0527	0.0382	-0.0619	-0.0233	0.1134	0.0915	0.2285*	0.1843	1		
Uses Research-based Assessment tool with Infants/Toddlers	0.0733	0.0744	0.2180*	-0.0272	0.0945	0.1421	0.2173*	0.5204*	0.1968*	0.1025	1	
Uses Research-based Assessment Tool with Preschoolers	0.0964	0.175	0.2466*	-0.082	0.0888	0.2269*	0.2236*	0.2390*	0.4286*	0.1324	0.6076*	1

	Collects feedback from families	A written plan is developed for using parent feedback	Family Communication Strategies (3 points for 4 strategies)	Conducting an intake interview with parents	Refers parents to preschool screenings	Creates transition plans for children	Meets with parents about transitions	Uses a Research-based Curriculum for Infants/Toddlers	Uses a Research-based Curriculum for Preschoolers	Average FCCERS Score	Uses Research-based Assessment tool with Infants/Toddlers	Uses Research-based Assessment Tool with Preschoolers
Uses assessment information to guide instruction (I/T)	0.1136	0.1026	0.2978*	-0.0359	0.2474*	0.2311*	0.2716*	0.4574*	0.2858*	0.1401	0.8731*	0.6195*
Uses assessment information to guide instruction (Preschool)	0.1172	0.1482	0.2915*	0.0421	0.1536	0.2451*	0.2642*	0.2294*	0.3674*	0.0993	0.5914*	0.8303*
PD Plan	0.1396	0.173	0.1771	0.038	0.2946*	0.3161*	0.3374*	0.1425	0.3689*	0.1308	0.1793	0.2724*
PD Registry Score	0.1297	0.168	0.2283*	0.0248	0.1922*	0.2265*	0.2399*	0.2562*	0.1574	0.1853*	0.1399	0.0655

	Shares assessment results with families of I/T	Shares assessment results with families of Pre	Uses assessment information to guide instruction (I/T)	Uses assessment information to guide instruction (Pre)	PD Plan	PD Registry Score
Shares assessment results with families of I/T	1					
Shares assessment results with families of Pre	0.7184*	1				
Uses assessment information to guide instruction (I/T)	0.9209*	0.6521*	1			
Uses assessment information to guide instruction (Pre)	0.6811*	0.8683*	0.7310*	1		
PD Plan	0.3183*	0.2943*	0.2963*	0.2917*	1	
PD Registry Score	0.1611	0.0808	0.1582	0.0203	0.1414	1

Table C2. Category totals correlated with overall star rating and observational scores (* indicates that correlation is significant at p<.05)

	Family Partnerships Category Total	Teaching Materials and Strategies Category Total	Tracking Learning Category Total	Teacher Training and Education Category Total	Total Points Earned	Star Rating	Average FCCERS Score
Family Partnerships Category Total	1						
Teaching Materials and Strategies Category Total	0.3345*	1					
Tracking Learning Category Total	0.2968*	0.3816*	1				
Teacher Training and Education Category Total	0.2982*	0.4146*	0.1649	1			
Total Points Earned	0.6211*	0.7407*	0.7394*	0.6642*	1		
Star Rating	0.5453*	0.7278*	0.7297*	0.5740*	0.9375*	1	
Average FCCERS Score	0.0552	0.6360*	0.127	0.2002*	0.3505*	0.3929*	1

Overall star rating is significantly correlated to scores in all four categories, but is most highly correlated with the Teaching Materials and Strategies category and the Tracking Learning category.

Appendix D: STATISTICS FOR MULTILEVEL MODELS

Table D1. Quality rating categories and covariates that predict child outcomes for a particular child attending a particular early care and education program

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
Variable	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Family Partnerships	0.49	0.77	0.87	0.59	-1.13	0.96	-1.13	0.94	-.36	0.79	0.60	0.87	0.35	0.89	0.02	0.50	0.44	0.65	-0.28	0.20
Tracking Learning	0.17	0.26	-.41	0.21	0.13	0.35	0.27	0.34	0.24	0.30	0.15	0.32	**-0.67***	0.31	0.04	0.18	-0.30	0.23	0.02	0.07
Teacher Training/Ed	0.38	0.30	-.01	0.24	0.32	0.40	0.53	0.39	0.01	0.32	0.12	0.36	-0.44	0.36	0.03	0.22	0.04	0.27	0.02	0.08
Teaching Materials	0.20	0.50	0.60	0.40	0.27	0.60	0.67	0.62	0.44	0.51	0.16	0.56	0.21	0.55	0.08	0.34	0.42	0.45	0.03	0.14
Household Income	-.19	0.50	-.49	0.36	-.67	0.64	0.74	0.62	-0.25	0.52	-0.21	0.60	0.89	0.46	0.12	0.32	0.16	0.41	0.18	0.13
Mother's Education	-.10	0.28	0.16	0.19	0.52	0.43	-0.89	0.40	-0.09	0.35	-0.82	0.46	**-0.78****	0.27	0.06	0.21	0.24	0.26	-0.12	0.08
Father's Education											**1.03****	0.36								
Race: Black																				
Asian			**8.33*****	2.41							**9.56***	4.22	6.76*	3.16						
Native American/P.I.																				
Hispanic											**9.12***	3.54								
African																				
Other Race											4.95	2.68								
Marital Status: Single																				
Living w/Partner							**6.42***	3.01												
Separated																	**8.26****	2.59		
Divorced					-11.95	4.69					**10.06****	3.81								
Home Language																			**0.26***	0.10
Immigrant Status																				

Models predicting child outcomes with quality rating category scores, controlling for family variables for all children attending fully-rated Parent Aware programs. The model presented for each outcome controls for family income, mother's education, and the following covariates if they proved to be significant in the full model: Child race (compared to White: Black, Asian, Native American/Pacific Islander, Hispanic, African), father's education, marital status (compared to married: Single, single living with partner, separated, divorced/widowed), language spoken at home, immigrant status.

*p < .05, **p < .01, ***p < .001

Note: Tracking learning and Teacher training and Teaching Materials predicted TOPEL PK when in the model alone (without other categories). Total points earned also predicted TOPEL

Table D2. ECERS-R, CLASS, and covariates that predict child outcomes for a particular child attending a particular early care and education program (all programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
Variable	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
ECERS-R	0.77	1.06	**1.62***	0.73	-0.001	1.35	1.26	1.18	-1.38	1.00	1.87	1.11	-1.44	1.27	0.21	0.70	-0.32	0.86	0.09	0.30
CLASS ES	-2.37	1.40	**2.46***	0.97	-2.15	1.80	0.45	1.61	0.37	1.35	1.10	1.50	-2.89	1.82	-0.69	0.95	-0.87	1.17	0.15	0.39
CLASS CO	1.45	1.24	**-2.91****	0.86	0.67	1.59	0.43	1.42	1.22	1.19	-2.01	1.31	2.74	1.52	1.05	0.84	0.26	1.01	-0.01	0.34
CLASS IS	-0.30	0.76	0.02	0.52	-1.08	1.02	-1.24	0.85	0.55	0.71	-0.28	0.81	0.21	0.83	0.01	0.50	0.59	0.61	-0.20	0.20
Household Income	-0.17	0.34	0.09	0.25	-0.80	0.47	-0.12	0.37	-0.12	0.31	-0.18	0.36	**1.06****	0.33	-0.02	0.21	-0.13	0.29	**0.23***	0.10
Mother's Education	-0.10	0.20	0.08	0.15	-0.32	0.32	-0.14	0.24	-0.34	0.20	-0.28	0.24	-0.30	0.17	-0.02	0.12	0.01	0.15	**-0.14***	0.05
Father's Education			-0.26	0.14	0.53	0.29														
Race: Black													**2.91***	1.34						
Asian											**5.85***	2.51								
Native American/P.I.																	**9.40***	4.44		
Hispanic							4.25	2.36							1.52	1.28				
African																				
Other Race																				
Marital Status: Single																				
Living w/Partner	3.15	1.76																		
Separated													**-8.06***	3.35						
Divorced	**6.0****	2.17																		
Home Language																				
Immigrant Status			**-4.50*****	1.17	-3.16	2.39														

Models predicting child outcomes with ECERS-R total and CLASS Emotional Support, CLASS Classroom Organization, and CLASS Instructional Support subscales, controlling for family variables (full sample). The model presented for each outcome controls for family income, mother's education, and the following covariates if they proved to be significant: Child race (compared to White: Black, Asian, Native American/Pacific Islander, Hispanic, African), father's education, marital status (compared to married: single, single living with partner, separated, divorced/widowed), language spoken at home, immigrant status.
*p < .05, **p < .01, ***p < .001

Table D3. ECERS-R, CLASS, and covariates that predict child outcomes for a particular child attending a particular early care and education program (fully-rated programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
Variable	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
ECERS-R			**3.66*** **	0.95							**3.25***	1.61	-2.87	1.50			-0.18	1.70	0.16	0.34
CLASS ES			**3.63***	1.48							-1.14	2.59	-3.79	2.29			-1.16	2.54	-0.36	0.58
CLASS CO			**-4.39****	1.30							-0.12	2.21	**4.28***	1.82			0.47	1.97	0.57	0.50
CLASS IS			-1.03	1.03							1.77	1.74	**-3.46***	1.48			**6.01*** **	1.36	**-0.72***	0.35
Household Income			0.16	0.40							0.26	0.69	**1.36****	0.45			-0.15	0.46	0.30	0.15
Mother's Education			0.07	0.23							-0.18	0.45	**-0.66***	0.26			0.21	0.26	-0.24	0.10
Father's Education																				
Race: Black			**5.83****	1.72																
Asian			**7.51***	3.74							**19.20****	6.31								
Native American/P.I.																				
Hispanic											**14.46*** **	3.95								
African																				
Other Race											5.86	3.21								
Marital Status: Single																				
Living w/Partner																				
Separated													**-8.21***	3.09			**10.09*** **	2.52		
Divorced											**12.89****	4.51								
Home Language																			**0.25***	0.12
Immigrant Status																				

Fully-rated sample only: Only includes models in which at least one observational score was a significant predictor.
*p < .05, **p < .01, ***p < .001

Table D4. FCCERS and covariates that predict child outcomes for a particular child attending a particular early care and education program (all programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
FCCERS	-0.49	1.44	-0.96	1.53	1.23	2.21	2.08	2.36	0.23	1.43	0.30	1.85	-0.36	2.13	-0.52	1.07	-1.14	1.04	0.43	0.60
Household Income	1.92	0.70	-0.87	0.59	-0.83	1.22	-0.53	1.12	0.37	0.73	-2.00	1.01	2.13	1.36	0.68	0.57	0.86	0.59	0.43	0.29
Mother's Education	-0.57	0.32	0.52	0.30	1.20	0.81	-0.28	0.71	0.06	0.50	-0.08	0.85	**-2.17***	0.86	-0.40	0.50	-0.68	0.53	-0.11	0.11
Father's Education											**1.53***	0.65					0.55	0.32	**0.29****	0.10
Race: Black									5.10	2.72	6.60	3.44								
Asian			**11.40*****	3.14									5.54	5.13						
Native American/P.I.																				
Hispanic																			**-3.53****	1.0
African																				
Other Race																				
Marital Status: Single													3.94	4.3					**2.92****	0.73
Living w/Partner																				
Separated											11.39	8.69					10.58	5.63	**10.08*****	1.82
Divorced			**8.27***	3.75											4.58	3.90	**8.65***	3.98	1.65	1.00
Home Language																			**0.47****	0.13
Immigrant Status							**-24.65****	7.02												

*p < .05, **p < .01, ***p < .001

Table D5. FCCERS-R and covariates that predict child outcomes for a particular child attending a particular early care and education program (fully-rated programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
FCCERS																	**-5.87*** **	1.39		
Household Income																	**2.40*** **	0.60		
Mother's Education																	**-1.51** **	0.45		
Father's Education																	0.43	0.26		
Race: Black																				
Asian																				
Native American/P.I.																				
Hispanic																				
African																				
Other Race																	**10.03*** **	2.46		
Marital Status: Single																				
Living w/Partner																				
Separated																	7.75	4.63		
Divorced																	**7.36***	3.15		
Home Language																				
Immigrant Status																				

Fully-rated sample only: Only includes models in which the observational score was a significant predictor.
*p < .05, **p < .01, ***p < .001

Table D6. ECERS-E and covariates that predict child outcomes for a particular child attending a particular early care and education program (all programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
ECERS-E Math	0.52	0.82	-0.88	0.59	0.19	0.89	0.33	0.73	0.26	0.66	0.10	0.81	-0.47	0.69	0.47	0.46	0.70	0.54	**-0.41***	0.19
ECERS-E Literacy	0.80	0.74	0.04	0.52	-0.95	0.85	**1.63***	0.68	0.11	0.61	0.53	0.75	-0.24	0.60	0.30	0.43	0.19	0.50	0.20	0.18
ECERS-E Diversity	0.16	0.45	-0.06	0.33	0.43	0.56	-0.46	0.41	**1.02****	0.37	0.31	0.46	**0.79***	0.37	-0.37	0.26	-0.57	0.31	0.18	0.11
Household Income	0.24	0.51	0.20	0.33	0.25	0.60	-0.84	0.47	-0.43	0.42	-0.01	0.52	0.56	0.40	0.13	0.27	-0.25	0.34	0.08	0.14
Mother's Education	-0.53	0.36	-0.19	0.19	-0.21	0.43	-0.41	0.34	-0.11	0.31	-0.62	0.38	-0.27	0.23	0.05	0.16	-0.24	0.21	-0.05	0.08
Father's Education	0.12	0.32																		
Race: Black																				
Asian					**-7.95***	4.00														
Native American/P.I.			**8.86***	4.47													**9.39***	4.42		
Hispanic							**8.66***	3.44									-4.18	2.19	**2.33****	0.86
African																				
Other Race					**-9.00***	4.07									**4.34***	2.01				
Marital Status: Single																			0.81	0.50
Living w/Partner													3.63	1.95			2.95	1.77		
Separated	**12.45***	5.63																		
Divorced	**7.24***	3.18																		
Home Language																				
Immigrant Status					**-7.65***	3.75														

*p < .05, **p < .01, ***p < .001

Table D7. ECERS-E and covariates that predict child outcomes for a particular child attending a particular early care and education program (fully-rated programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
ECERS-E Math															0.89	0.74			**-0.67***	0.32
ECERS-E Literacy															**-1.44***	0.69			0.17	0.36
ECERS-E Diversity															0.54	0.39			0.17	0.20
Household Income															-0.13	0.55			0.07	0.23
Mother's Education															0.34	0.31			**-0.36****	0.13
Father's Education																				
Race: Black															**4.35***	1.88				
Asian																				
Native American/P.I.																				
Hispanic																				
African																				
Other Race															**9.07****	3.11				
Marital Status: Single																				
Living w/Partner																				
Separated																				
Divorced															6.16	3.29				
Home Language																				
Immigrant Status																				

Fully-rated sample only: Only includes models in which the observational score was a significant predictor.
*p < .05, **p < .01, ***p < .001

Table D8. Star level and covariates that predict child outcomes for a particular child attending a particular early care and education program (fully-rated programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
1- and 2-stars (vs. 4-stars)	-1.31	2.09	-0.47	1.59	-0.90	2.70	-4.14	2.46	-2.82	2.69	-0.62	2.17	**7.18****	2.40	-1.30	1.45	-2.13	1.81	0.46	0.57
3-stars (vs. 4-stars)	-0.70	1.42	0.57	1.07	0.68	1.68	-0.10	1.56	-0.12	1.41	-0.65	1.52	0.80	1.39	-0.04	0.91	-0.46	1.09	-0.08	0.36
Household Income	0.46	0.30	-0.19	0.20	-0.59	0.37	-0.05	0.32	0.14	0.28	-0.13	0.31	**0.70****	0.27	0.08	0.18	-0.25	0.22	0.12	0.07
Mother's Education	-0.16	0.15	-0.06	0.11	0.22	0.25	-0.40	0.21	-0.34	0.19	-0.20	0.21	-0.27	0.14	-0.03	0.10	0.04	0.12	-0.06	0.04
Father's Education							2.90	1.67												
Race: Black	**2.65***	1.11																		
Asian											2.44	1.98								
Native American/P.I.																				
Hispanic																				
African																				
Other Race																				
Marital Status: Single																				
Living w/Partner																				
Separated													-4.70	2.53						
Divorced	**4.19***	1.85			**-6.79****	2.48							**3.65***	1.46						
Home Language																				
Immigrant Status					**-4.49***	2.10														

*p < .05, **p < .01, ***p < .001

Table D9. Quality rating categories and covariates that predict child outcomes for a particular child attending a particular early care and education sample (Models with the low-income sample)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
Variable	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Family Partnerships			-0.66	0.74							0.43	1.28	0.66	0.62						
Tracking Learning			0.30	0.22							-0.43	0.47	**-1.00***	0.44						
Teacher Training/Ed			**-0.94*****	0.26							**1.18***	0.47	0.53	0.53						
Teaching Materials			-0.23	0.46							0.06	0.75	0.02	0.82						
Household Income			-0.16	0.58							0.93	0.95	0.38	0.44						
Mother's Education			0.51	0.28							-0.09	0.41	-0.27	0.17						
Father's Education			**-0.66****	0.25																
Race: Black													**3.31****	1.19						
Asian											**20.73***	8.28								
Native American/P.I.																				
Hispanic																				
African																				
Other Race																				
Marital Status: Single																				
Living w/Partner			**4.00***	1.80																
Separated													**-5.05***	2.45						
Divorced											**11.97***	5.42	**4.75****	1.65						
Home Language																				
Immigrant Status											7.24	4.04								

Low-income sample only: Only includes models in which the quality category score was a significant predictor.
*p < .05, **p < .01, ***p < .001
Note: Teaching Materials on PLBS p = .057

Table D10. ECERS-R, CLASS, and covariates that predict child outcomes for a particular child attending a particular early care and education program (all programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
Variable	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
ECERS-R					-2.44	1.65									1.15	0.97				
CLASS ES					-4.51	2.52									-2.25	1.42				
CLASS CO					1.62	2.36									**2.89***	1.34				
CLASS IS					**3.79***	1.57									-1.02	0.86				
Household Income					-1.31	0.70									-0.21	0.41				
Mother's Education					0.04	0.33									-0.23	0.17				
Father's Education															0.21	0.16				
Race: Black															2.21	1.22				
Asian															0.68	2.49				
Native American/P.I.															0.78	3.70				
Hispanic															**4.42***	1.91				
African																				
Other Race					8.00**	2.79									0.81	1.70				
Marital Status: Single															-0.91	1.34				
Living w/Partner					4.69	2.80									-0.57	1.45				
Separated															0.27	2.88				
Divorced															-2.64	1.68				
Home Language															-0.29	0.17				
Immigrant Status															1.47	1.74				

Low-income sample
*p < .05, **p < .01, ***p < .001

Table D11. ECERS-R, CLASS, and covariates that predict child outcomes for a particular child attending a particular early care and education program (fully-rated programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
Variable	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
ECERS-R			**3.23****	1.18			1.12	2.85	-1.14	2.39			-2.19	1.11	**3.26***	1.61	3.00	1.70		
CLASS ES			3.30	3.16			3.28	7.53	-11.22	6.37			-5.76	3.29	-1.45	4.71	-4.08	4.71		
CLASS CO			-4.51	3.00			1.45	7.35	13.34*	5.91			**8.11****	2.96	1.85	4.43	2.11	4.37		
CLASS IS			0.48	0.88			**-4.46***	2.17	-0.27	1.89			**-3.27****	0.96	**4.46***	1.67	**4.85****	1.41		
Household Income			0.78	0.52			**-3.36***	1.32	-1.19	1.12			1.06	0.55	-0.26	0.77	-2.72	0.84		
Mother's Education			0.51	0.30			-1.17	0.93	0.91	0.69			**-0.73****	0.22	0.71	0.48	0.88*	0.36		
Father's Education			**-0.83****	0.26			0.34	0.71	-1.86**	0.59					0.41	0.38				
Race: Black			**6.45*****	1.81			3.43	4.55							-4.32	3.23				
Asian																				
Native American/P.I.																				
Hispanic			**13.59***	5.23			-9.15	8.44							13.44	7.26	11.98**	3.75		
African																				
Other Race			2.03	1.74			-0.73	4.46	-9.70**	3.08					-0.66	2.36				
Marital Status: Single			2.47	2.11			-3.10	5.48							1.92	3.13				
Living w/Partner			**4.68***	2.01			1.96	5.35							1.53	2.84				
Separated			1.66	2.98			-4.02	6.89					**-8.70*****	2.39	5.08	4.74	**11.21*****	2.88		
Divorced			-1.67	3.22			-0.97	10.31					**11.32*****	2.54	2.99	6.42				
Home Language			-1.32	0.81			2.29	1.27							-0.39	0.76				
Immigrant Status			-0.60	2.92			6.46	5.64	8.17	4.32			**-5.41****	1.92	5.58	4.09	7.59	3.88		

Fully-rated low-income sample only: Only includes models in which at least one observational score was a significant predictor.
*p < .05, **p < .01, ***p < .001

Table D12. FCCERS and covariates that predict child outcomes for a particular child attending a particular early care and education program (all programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
FCCERS	1.33	1.26	**-3.06*** **	0.75	**7.74***	2.27	1.56	2.94	**4.70*** **	0.28	-4.00	2.33	**-4.99***	1.72	-1.30	2.66	**-9.23*** **	1.17	1.07	0.89
Household Income	**3.65*** **	0.89	**-1.60***	0.68	3.20	1.97	-1.17	2.46	**-5.40*** **	0.18	2.12	1.43	**6.79****	1.56	4.05	3.20	**5.84*** **	0.62		
Mother's Education	0.08	0.61	**-2.02*** **	0.45	**3.86****	0.86	-0.74	0.89			0.68	0.87	-1.03	1.69	-1.93	1.65	**-1.59****	0.41		
Father's Education			0.44	0.28																
Race: Black									**14.39*** **	0.53	12.48**	3.97					**7.53****	1.88		
Asian	72.04	34.79	**107.44***	44.95																
Native American/P.I.																				
Hispanic									**5.63*** **	0.42	-2.79	5.02	**22.24****	6.14						
African																				
Other Race																	**14.96*** **	2.38		
Marital Status: Single	74.85	36.16	**106.59***	45.58																
Living w/Partner	74.18	36.23	**112.89***	45.68																
Separated	77.49	39.35	94.71	47.40																
Divorced	**81.88***	35.23	**118.83***	45.51																
Home Language	7.04	3.47	**11.12***	4.51																
Immigrant Status			**51.82*** **	11.51																

Low-income sample
*p < .05, **p < .01, ***p < .001

Table D13. FCCERS-R and covariates that predict child outcomes for a particular child attending a particular early care and education program (fully-rated programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
FCCERS			**-3.63***	1.48	5.25**	1.71			**-20.43*****	1.17	8.81***	1.38					**-7.88*****	1.11		
Household Income			-2.27	1.23	-1.37	1.43			**2.10*****	0.37	-1.14*	0.43					**5.68*****	0.73		
Mother's Education			-0.10	0.30	1.55	0.98			**11.21*****	0.67	-5.32***	0.75					**-2.23*****	0.29		
Father's Education									**-2.72*****	0.22	2.15***	0.27								
Race: Black									**2.96****	0.97	16.31***	1.31					**4.42****	1.14		
Asian									**6.56****	1.86	-6.07**	2.15								
Native American/P.I.																				
Hispanic					-14.42**	4.34			**33.23*****	2.48	-20.90***	2.17								
African																				
Other Race											-2.94**	0.99					**11.77*****	2.02		
Marital Status: Single									**28.25*****	2.25	-25.74***	2.40								
Living w/Partner									**-9.71*****	2.15										
Separated					15.55*	6.52			**32.54*****	3.32	-14.05**	3.84								
Divorced					-26.18***	5.35			**-3.95***	1.58										
Home Language																				
Immigrant Status																				

Fully-rated low-income sample only: Only includes models in which the observational score was a significant predictor.
*p < .05, **p < .01, ***p < .001

Table D14. ECERS-E and covariates that predict child outcomes for a particular child attending a particular early care and education program (all programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
ECERS-E Math	-0.59	1.16	-0.51	0.77	-1.75	1.52	4.54	1.23	-0.11	0.95	0.36	1.18	-0.64	1.07	0.55	0.62	1.74	0.94	-0.35	0.32
ECERS-E Literacy	1.13	1.15	0.23	0.75	0.39	1.58	0.94	1.25	0.66	0.96	0.64	1.34	-0.46	1.07	0.72	0.68	0.87	0.96	0.15	0.34
ECERS-E Diversity	0.59	0.59	0.24	0.39	0.83	0.97	**-1.50***	0.65	0.85	0.51	-0.84	0.68	0.36	0.53	-0.58	0.33	-1.04*	0.48	0.23	0.16
Household Income	1.10	0.80	0.22	0.54	-1.72	1.12	**1.82***	0.84	-0.96	0.66	1.07	0.07	0.05	0.71	0.10	0.45	-0.35	0.66	-0.25	0.23
Mother's Education	-0.51	0.35	-0.02	0.25	0.51	0.60	-0.36	0.48	-0.11	0.36	0.39	0.49	-0.15	0.29	0.14	0.19	-0.61	0.28	0.003	0.10
Father's Education			-0.41	0.22							**-0.79***	0.35								
Race: Black									-0.19	1.52										
Asian											**-11.07***	5.11								
Native American/P.I.			7.75	4.24																
Hispanic	-4.70	3.15									**-9.92****	3.38							**2.33***	0.93
African																				
Other Race															**9.38****	2.91				
Marital Status: Single																				
Living w/Partner					7.85	4.03											3.72	2.44		
Separated																				
Divorced																				
Home Language													0.51	0.26						
Immigrant Status					-6.09	3.87					6.30	3.37								

Low-income full sample
*p < .05, **p < .01, ***p < .001

Table D15. ECERS-E and covariates that predict child outcomes for a particular child attending a particular early care and education program (fully-rated programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
ECERS-E Math					13.99*	4.95	-0.71	2.67	7.25*	2.60	-9.01*	3.21	-2.21	1.50						
ECERS-E Literacy					-1.84	3.51	-7.49*	3.26	0.85	2.29	-0.35	2.23	-0.51	1.16						
ECERS-E Diversity					-6.87*	2.43	0.62	1.58	-0.78	1.65	5.92**	1.62	1.83*	0.74						
Household Income					0.21	2.16	-5.94**	1.85	-2.72	1.72	1.87	1.79	1.36	0.82						
Mother's Education					-1.01	1.51	-1.77	0.88	0.23	0.91	-2.36*	0.83	-0.61	0.32						
Father's Education					3.16*	1.17			-1.32	0.90	-2.27*	0.92								
Race: Black					3.47	5.67	15.44*	5.80												
Asian																				
Native American/P.I.																				
Hispanic					-19.09	9.28					34.24**	9.02								
African																				
Other Race					28.75**	7.78							-6.81*	3.11						
Marital Status: Single					0.46	5.03	-19.78***	4.17												
Living w/Partner													9.24*	3.59						
Separated																				
Divorced													10.67*	3.90						
Home Language					4.58**	1.38					-4.57**	1.21								
Immigrant Status																				

Low-income, fully-rated sample only: Only includes models in which the observational score was a significant predictor.
*p < .05, **p < .01, ***p < .001
Note: SCBE-AA was marginally predicted by Math (p = .0504) and Diversity (p = .0544)

Table D16. Star level and covariates that predict child outcomes for a particular child attending a particular early care and education program (fully-rated programs)

	PPVT		IGDI		TOPEL PA		TOPEL PK		WJ AP		WJ QC		SCBE SC		SCBE AW		SCBE AA		PLBS	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
1- and 2-stars (vs. 4-stars)	**-7.21***	3.18	1.78	2.03	-4.94	6.02	-4.62	5.27	0.78	3.73	-1.08	3.78	2.31	3.50	-4.52	3.54	-0.67	3.48	-0.01	1.19
3-stars (vs. 4-stars)	0.51	2.09	2.43	1.42	-3.32	2.92	-2.50	3.23	-1.20	2.39	-2.85	2.43	2.12	2.22	-1.75	2.10	-0.30	2.07	-0.01	0.59
Household Income	0.78	0.89	-0.52	0.59	-2.31	1.24	-2.24	1.20	-0.62	0.97	0.68	0.99	0.27	0.62	0.48	0.76	-0.01	0.86	0.04	0.23
Mother's Education	-0.09	0.32	0.53	0.29	0.38	0.54	-1.09*	0.53	0.09	0.59	-0.01	0.44	**-0.54***	0.26	0.14	0.33	0.42	0.36	**-0.38****	0.13
Father's Education			-0.68*	0.26					-0.79	0.46									0.14	0.10
Race: Black			**3.73***	1.52					**5.80***	2.46										
Asian											15.49	8.20								
Native American/P.I.																				
Hispanic																				
African																				
Other Race																				
Marital Status: Single																				
Living w/Partner			**3.61***	1.80																
Separated													**-6.12***	2.54			**7.80***	3.00		
Divorced													**9.51****	2.83						
Home Language																			**0.28***	0.13
Immigrant Status	**-7.82***	3.43																		

Low-income

*p < .05, **p < .01, ***p < .001

Note: On PPVT, although 1- and 2-stars is significantly lower than 4-stars, it is important to note that 3-stars had a higher PPVT change score than 4-stars (1- and 2-stars: M = -3.40, 3-stars: M = 7.14, 4-stars: M = 4.67), and that stars was not a significant predictor when included in the model as a continuous variable.

Appendix E: ALTERNATIVE RATING MODELS

Table E1. Model 2 Rating Structure (Building Blocks)

	Family Partnerships	Teaching Materials and Strategies	Tracking Learning	Teacher Training and Education
1 star	→ Program uses at least 2 strategies to communicate with families → Program refers parents to preschool screening	→ Program uses a curriculum/ approach (with all children) that is demonstrably aligned with the Minnesota Early Childhood Indicators of Progress (ECIPs)	→ Program can document how children's progress is being tracked (for at least preschoolers)	→ Provider/all lead teachers have joined PD Registry[27]
2 stars	→ Program uses at least 3 strategies to communicate with families → Program collects feedback from families → Program conducts intake interviews	→Program receives average ERS score of at least 3.0 → CENTERS SERVING PRESCHOOLERS: Program receives score of at least 5.0 Emotional Support subscale and 4.0 in Classroom Organization subscale of CLASS.	→ Program shares assessment information with children's families at least twice per year (at least for preschoolers)	→ Provider/all lead teachers have average Career Lattice score of at least 3.5
3 stars	→ Program uses at least 4 strategies to communicate with families → A written plan is developed for using family feedback → Program creates transition plans for children	→ Program uses an approved curriculum for preschool classrooms (and relevant staff have been trained in this curriculum) →Program receives average ERS score of at least 4.0 → CENTERS SERVING PRESCHOOLERS: Program receives score of at least 6.0 on Emotional Support subscale and 5.0 on Classroom Organization subscale of CLASS	→ Program can document how children's progress is being tracked, for all ages. → Program shares assessment information with children's families at least twice per year, for all ages.	→ Provider/all lead teachers have professional development plan → Provider/all lead teachers have average Career Lattice score of at least 6.
4 stars	→ Program meets with parents about transitions	→ Program uses an approved curriculum for all classrooms (and staff have been trained in this curriculum) →Program receives average ERS score of at least 5.0, with no classroom below 3.0 → CENTERS SERVING PRESCHOOLERS: Program receives score of at least 3.0 in Instructional Support subscale of CLASS.	→ Program uses an approved, research-based instructional assessment tool for all children at least twice per year (and staff are trained to use the tool) → Program uses child assessment information to guide instruction and design individual goals for children.	→ CENTERS: Program's director or educational coordinator hold a Bachelor's degree or higher in early childhood education or related field. → Provider/all lead teachers have average Career Lattice score of at least 8.

[27] This item is not explicitly measured by a current Parent Aware indicator. Instead, programs are awarded this indicator if the program received any points on the PD registry.

Table E2. Model 3 Rating Structure (Hybrid Model, Centers)

	Family Partnerships	Tracking Learning	Teacher Training and Education
1 star	→ Program uses at least 2 strategies to communicate with families → Program refers parents to preschool screening	→ Program can document how children's progress is being tracked	→ Provider/all lead teachers have joined PD Registry
2 stars	→ Program uses at least 3 strategies to communicate with families → Program conducts intake interviews	→ Program shares assessment information with children's families at least twice per year	→ Provider/all lead teachers have professional development plan
3 stars	Program earns at least 10 points from those below AND uses a curriculum that is aligned with the ECIPs in all classrooms AND has an average ERS score of at least 3.0		
4 stars	Programs earn at least 20 points from those below.		

Family Partnerships	Teaching Materials and Strategies	Tracking Learning	Teacher Training and Education
1 point: Program collects feedback from families **2 points: A written plan is developed for using family feedback**	**1 point:** Program uses an approved research-based curriculum in some classrooms/with some children. **3 points:** Program uses an approved research-based curriculum in all classrooms/with all children.	**1 point:** Program uses an approved research-based assessment tool in some classrooms/with some children. **3 points:** Program uses an approved research-based assessment tool in all classrooms/with all children.	**1 point:** Program's director or educational coordinator hold a Bachelor's degree or higher in early childhood education or related field.
1 point: Program uses at least 4 strategies to communicate with families	**1 point:** Program receives average ERS score of at least 4.0 **2 points:** Program receives average ERS score of at least 5.0 **3 points:** Program receives averages ERS score of at least 6.0	**1 point:** Program uses child assessment information to guide instruction and design individual goals with some children. **3 points:** Program uses child assessment information to guide instruction and design individual goals for all children.	**1 point:** All lead teachers have average Career lattice score of at least 6.0 **2 points:** All lead teachers have average Career lattice score of at least 7.0 **3 points:** All lead teachers have average Career lattice score of at least 8.0 **4 points:** All lead teachers have average Career lattice score of at least 9.0 **5 points:** All lead teachers have average Career lattice score of at least 10.0
1 point: Program creates transition plans for children **2 points: Program meets with parents about transitions**	**1 point:** Program receives score of at least 5.0 in Emotional Support subscale and 4.0 in Classroom Organization subscale of CLASS. **2 points:** Program receives score of at least 6.0 in Emotional Support subscale and 5.0 in Classroom Organization subscale of CLASS. **3 points:** Program receives score of at least 6.0 Emotional Support subscale and 5.0 in Classroom Organization and 3.0 in Instructional Support subscale of CLASS.		
5 points possible	**9 points possible**	**6 points possible**	**6 points possible**

Table E3. Model 3 Rating Structure (Hybrid Model, Family Child Care)

	Family Partnerships	Tracking Learning	Teacher Training and Education
1 star	→ Program uses at least 2 strategies to communicate with families → Program refers parents to preschool screening	→ Program can document how children's progress is being tracked	→ Provider/all lead teachers have joined PD Registry
2 stars	→ Program uses at least 3 strategies to communicate with families → Program conducts intake interviews	→ Program shares assessment information with children's families at least twice per year	→ Provider/all lead teachers have professional development plan
3 stars	Program earns at least 10 points from those below AND uses a curriculum that is aligned with the ECIPs in all classrooms AND has an average ERS score of at least 3.0		
4 stars	Programs earn at least 20 points from those below.		

Family Partnerships	Teaching Materials and Strategies	Tracking Learning	Teacher Training and Education
1 point: Program collects feedback from families **2 points: A written plan is developed for using family feedback**	**1 point:** Program uses an approved research-based curriculum in some classrooms/with some children. **3 points:** Program uses an approved research-based curriculum in all classrooms/with all children.	**1 point:** Program uses an approved research-based assessment tool in some classrooms/with some children. **3 points:** Program uses an approved research-based assessment tool in all classrooms/with all children.	**1 point:** Lead provider(s) have average Career lattice score of at least 5.0 **2 points:** Lead provider(s) have average Career lattice score of at least 6.0 **3 points:** Lead provider(s) have average Career lattice score of at least 7.0 **4 points:** Lead provider(s) have average Career lattice score of at least 8.0 **5 points:** Lead provider(s) have average Career lattice score of at least 9.0 **6 points:** Lead provider(s) have average Career lattice score of at least 10.0
1 point: Program uses at least 4 strategies to communicate with families	**1 point:** Program receives average ERS score of at least 4.0 **3 points:** Program receives average ERS score of at least 5.0 **5 points:** Program receives averages ERS score of at least 6.0	**1 point:** Program uses child assessment information to guide instruction and design individual goals with some children. **3 points:** Program uses child assessment information to guide instruction and design individual goals for all children.	
1 point: Program creates transition plans for children **2 points: Program meets with parents about transitions**			
5 points possible	**8 points possible**	**6 points possible**	**6 points possible**

Appendix F: PARENT REPORTS OF CHILDREN'S SKILLS

Analyses of child outcomes in other sections of this report have focused on direct child assessments and teacher report. However, as part of the parent interview, some information was collected on child development by parent report. The analyses in this section examine parent report of child development in order to see whether parent report can provide a more complete picture of children's school readiness. This section provides some descriptive information about parent report of child development, examines correlations between parent and teacher report, and finally explores the relations between Parent Aware star ratings and indicators and parent report.

Parents were asked how often their child engages in certain pro-social behaviors, such as using words to communicate needs and wants and seeking help from adults when needed. At least 90% of parents report that "most of the time" or "almost all of the time" their child uses words to communicate, is curious and enthusiastic about learning, and gets along well with others (see Table F1). A majority of parents also report that their child asks an adult for help when needed "most" or "almost all" of the time (86%).

Table F1. Frequency of children's pro-social behaviors

"My child…" (n = 550)	Never	Rarely	Sometimes	Most of the time	Almost all of the time
Uses words to communicate what he or she needs, wants, or is thinking about	<1%	0%	1%	10%	88%
Is curious and enthusiastic about learning new things	<1%	<1%	3%	15%	81%
Takes turns, shares, and gets along well with other children	<1%	0%	10%	50%	40%
Asks an adult for help when he or she has a problem with something	<1%	1%	12%	40%	46%

Source: Parent Aware Evaluation Parent Interview

Parents were asked about what their child can generally do on a typical day. A majority of parents report that their child can recite at least "most" letters of the English alphabet (84%) and can count up to at least 20 in English (83%). Over 96% of parents report that their child can tell how old he or she is, ask questions using interrogative words (e.g., "where"), tell which item is bigger or smaller, and sort items by simple categories (see Table F2). Nearly all parents also report their child being able to talk about yesterday (93%), describe the weather (94%), and do basic fine and gross motor activities, such as tracing shapes (97%), dressing one's self (93%), catching balls (92%) and walking downstairs alone (99%).

Table F2. Parent report of their child's general abilities

"My child…" (n = 552)	Yes	No
Tells how old he or she is when asked	97%	3%
Asks questions using words such as "who," "what," "where"	96%	4%
Tells which of two items is bigger or smaller	97%	3%
Tells one thing he or she did yesterday	93%	7%

"My child…" (n = 552)	Yes	No
Traces at least two simple shapes such as circle and a square	97%	3%
Tells what the weather is like	94%	6%
Names items in simple categories such as animals, clothes, food	97%	3%
Dresses without assistance	93%	7%
Catches a large bounced ball with both hands when bounced to him or her	92%	8%
Walk downstairs without help, while holding the rail	99%	1%

Source: Parent Aware Evaluation Parent Interview

Overall, there was little variation across parent reports of child development. Nearly all parents reported that their child engages in pro-social behaviors and can perform several general abilities. Next, relations between parent report and teacher report (SCBE-30 and PLBS) were examined.

Some correlations in the expected direction exist between parent and teacher reports of children's general abilities and behaviors (for more details on teacher report of children's social competence and behavior, please refer to section 5). Significant correlations are presented in Table F3 (PLBS is not included in the table because it was not significantly associated with any parent report variable). When controlling for income and parental education (both mothers' and fathers'), parent report of how well their child gets along with others is significantly associated with teacher report of social competence (SCBE-Social Competence $r = 0.215$, $p < 0.0001$) and aggression (SCBE-Anger Aggression $r = -0.165$, $p = 0.0032$) at low magnitudes. There is also a significant negative relationship between parent report of their child's curiosity about learning and teacher report of anxiety/withdrawal ($r = -0.14$, $p = 0.0129$). In the unexpected direction, teacher report of anxiety/withdrawal is significantly positively associated with parent report of cognitive skills such as describing the weather ($r = 0.124$, $p = 0.0278$), using interrogative words to ask questions ($r = 0.178$, $p = 0.0015$), and using comparative adjectives ($r = 0.177$, $p = 0.0016$). Another unexpected finding is an inverse relationship between teacher report of social competence and parent report of their child's ability to talk about the recent past (e.g., what the child did yesterday) ($r = -0.136$, $p = 0.016$).

Table F3. Correlations between parent and teacher report of children's general abilities

Parent report that their child…	Teacher Report		
	SCBE Social Competence	SCBE Anger Aggression	SCBE Anxiety Withdrawal
is curious and enthusiastic about learning			-0.14*
gets along with others	0.215*		-0.165*
can count		-0.184*	
can talk about yesterday	-0.136		
can describe the weather			0.124
can ask questions using "who", "what", and "where"			0.178
can say which item is bigger or smaller			0.177

Source: Parent Aware Evaluation Parent Interview
Note: All correlations presented in the table were significant at $p < .05$
*result was in the expected direction

Given that there were some expected relations between parent and teacher report of child development, but also some unexpected relations, it is unclear whether parent report acts as a useful tool in understanding school readiness beyond what is provided by teacher report. Another way to look at the contribution of parent report is to test for the effects of Parent Aware star rating and indicators using parent report as dependent variables.

Multilevel models were run to test for the predictive value of quality rating categories (Parent Aware indicators: Family Partnerships, Tracking Learning, Teaching Materials and Strategies, and Teacher Training and Education) on parent reports of child development controlling for the same child and family variables that were controlled for in the analyses in section 6. Results are presented in Table F4.

Table F4. Quality category scores predicting parent report of child development

Quality Category	Outcomes related to in expected direction	Outcomes related to in unexpected direction
Family Partnerships	"can count", "walk down stairs"	None
Tracking Learning	None	None
Teaching Materials and Strategies	None	"can count", "talk about yesterday", "walk down stairs"
Teacher Training and Education	"trace shapes", "walk down stairs"	None

In the expected direction, Family Partnerships was predictive of parent report of child "can count" and "walk down stairs", and Teacher Training and Education was predictive of "trace shapes" and "walk down stairs". Teaching Materials and Strategies was only predictive of outcomes in the unexpected direction.

Multilevel models were also run to test the relation between Parent Aware star level and parent reports of child development. Stars were collapsed across 1- and 2-stars and 3- and 4-stars

and automatically-rated 4-star programs. Star level was related to some outcomes such that parents of children in automatically-rated programs reported higher levels of child performance than parents of children in 3- and 4-star programs on: Using words to communicate what he/she needs, asks questions using words such as “who”, “what”, “where”, traces shapes, and walk down stairs. It should be kept in mind, however, that there was little variance across these outcomes. For example, parents of children in both 1- and 2-star programs and automatically-rated 4-star programs all answered “yes” to the question about walking down stairs independently.

Taken together, it seems that looking at parent report of child development does not significantly add to distinguishing levels of school readiness beyond what we learn from direct assessments and teacher report. Although they are not strongly correlated to teacher report, there is little variance in the ways parents respond to these questions, and no strong evidence for systematic, meaningful associations between parent report of child development and either Parent Aware star rating level or quality indicators.

Appendix G: OBSERVATION SCORES USING CUT-OFF POINTS

Observation scores using cut-off points

Further analyses examining the relations between observational scores and child outcomes were conducted by re-coding the predictors (ECERS-R, CLASS, FCCERS) into two categories: one group scoring at or higher than a given cut-point, and the other group scoring lower than the cut-point. For example, child outcomes were examined for children in programs that scored 5 or higher on the ECERS-R compared to children in programs that scored less than 5 on the ECERS-R. See Table G1 for cut-points and cell sizes.

Table G1. Cut-points and number/percent of children in group at or above cut-point

Score	Cut-point	Number of children in programs scoring above cut-point	Percent of children in programs scoring above cut-point
ECERS-R	5	38	7%
CLASS Emotional Support	5	427	81%
CLASS Classroom Organization	5	362	70%
CLASS Instructional Support	3	175	30%
FCCERS-R	3.7	19	31%

Source: Center for Early Education and Development (CEED), University of Minnesota as of June, 2011

Multilevel models were run to assess the relations between the observation scores and all child outcomes. Similar to findings reported in Section 7, there were no systematic relations between observation scores and child outcomes. There were a few significant relations in each analysis, but none of the findings using cut-points matched the findings when relations between observation scores and child outcomes were examined using observation scores as continuous predictors (in Section 7).

Using cut-point groups, in the sample of fully-rated programs, ECERS-R predicted the PLBS in the expected direction, CLASS Classroom Organization predicted TOPEL Print Knowledge in the expected direction, and CLASS Instructional Support predicted the IGDI in the expected direction. In addition, CLASS Instructional Support predicted both TOPEL Print Knowledge and PLBS not in the expected direction. Also in the sample of fully-rated programs, FCCERS-R predicted TOPEL Print Knowledge in the expected direction.

Observation scores predicting aligned child outcomes

The relation between observation scores and child outcomes was also examined by aligning specific observation scores with specific child outcomes, as was conducted in the Year 3 report. For example, one might expect a subscale of the ECERS-R that focuses on language (Language-Reasoning) would predict child outcome language measures (PPVT, IGDI, TOPEL). See Table G2 for a list of the predicted relations between specific observation scores and specific child outcomes.

Table G2. Predicted relations between observation scores and child outcomes

Observation Measure	Child Outcome	Result
ECERS-R Language-Reasoning	PPVT	ns
	IGDI	ns
	TOPEL Phonological Awareness	ns
	TOPEL Print Knowledge	Significant in full sample
ECERS-R Activities	WJ-III Applied Problems	ns
	WJ-III Quantitative Concepts	ns
ECERS-R Interactions	SCBE-30 Social Competence	ns
	SCBE-30 Anxiety Withdrawal	ns
	SCBE-30 Anger Aggression	ns
	PLBS	ns
CLASS Emotional Support	SCBE-30 Social Competence	ns
	SCBE-30 Anxiety Withdrawal	ns
	SCBE-30 Anger Aggression	ns
CLASS Classroom Organization	SCBE-30 Social Competence	Significant in fully-rated sample
	SCBE-30 Anxiety Withdrawal	ns
	SCBE-30 Anger Aggression	ns
	PLBS	ns
CLASS Instructional Support	PPVT	ns
	IGDI	ns
	TOPEL Phonological Awareness	ns
	TOPEL Print Knowledge	ns
ECERS-E Literacy	PPVT	ns
	IGDI	ns
	TOPEL Phonological Awareness	ns
	TOPEL Print Knowledge	Significant in full sample
ECERS-E Math	WJ-III Applied Problems	ns
	WJ-III Quantitative Concepts	ns
FCCERS Listening and Talking	PPVT	ns
	IGDI	ns
	TOPEL Phonological Awareness	ns
	TOPEL Print Knowledge	ns
FCCERS Activities	WJ-III Applied Problems	ns
	WJ-III Quantitative Concepts	ns
FCCERS Interaction	SCBE-30 Social Competence	ns
	SCBE-30 Anxiety Withdrawal	Significant in wrong direction
	SCBE-30 Anger Aggression	ns
	PLBS	ns

Source: Child Trends Assessment Data

In the Year 3 report, there were no significant relations in the predicted direction. In the current analyses, there were three significant results in the predicted direction: ECERS-R Language-Reasoning predicted TOPEL Print Knowledge in the full sample, CLASS Classroom Organization predicted SCBE-30 Social Competence in the fully-rated sample of programs, and ECERS-E Literacy predicted TOPEL Print Knowledge in the full sample. These findings are

similar to other models of observation measures predicting child outcomes and do not reveal stronger relations between the two.

Appendix H: DATA SOURCES FOR THE PARENT AWARE EVALUATION

Data/information for this report was collected from several sources. Short descriptions of each data source, format, and organizations responsible for data are listed in this section.

All fully-rated programs and a sample of automatically-rated programs were asked to participate in the Parent Aware evaluation by:

1) Completing a written survey
2) Agreeing to an observation(s) of their site. (Fully-rated sites were observed as part of the Parent Aware rating process. Automatically-rated programs were asked to allow an observer to conduct the ERS and CLASS, as appropriate, following the same guidelines used for fully-rated programs.)
3) Assisting the research team in recruiting families to participate in the Evaluation:
    a. Children would be assessed using a battery of school readiness assessment tools
    b. Parents would be interviewed over the phone
4) conducting indirect assessments of children participating in the evaluation
5) assisting research team in recruiting parents to be surveyed

The research team solicited participation from all programs known to be participating in Parent Aware (even if not yet fully-rated), with the exception that not every automatically-rated program was asked to participate. The decision to sample only a subset of automatically-rated programs was made because of the large number of programs in this category (2/3 of currently rated programs).

Participation in the Evaluation is voluntary. Programs were mailed information about the Parent Aware evaluation and called several times. If a program consented to participate, they were sent the Parent Aware Evaluation Survey and consent forms for children and parents in the program to join the evaluation. Some providers chose to complete some pieces of the Evaluation but not others, so there are some programs for whom we have survey data but not observation data, or observation data but not child assessment data. See the Year 3 Evaluation Report for more details on recruitment of programs.

Survey of Programs Participating in Parent Aware, Child Trends

All programs that consented to participate in the Evaluation of Parent Aware were asked to complete a survey. Targeted surveys were created for program directors, classroom teachers, and family child care providers. A paper survey was mailed to participants representing 186 programs: 108 directors and 78 family child care providers. Response rate was 59% for family child care providers and 68% for center-based directors/center managers. All respondents were mailed a $25 gift card upon completion of the survey (see Table H1).

Table H1. Number of survey respondents of each program type

Respondents	Fully-rated	Auto-rated	Total
Family Child Care providers	41	5	46
Center Directors	36	37	73
Total	77	42	119

While the response rate to the survey was moderate, the response rate was higher last year for family child care providers when the response rate was 74%. The response rate for directors this year is higher than it was last year when it was 55%.

Child Assessment Measures, Child Trends

Children were recruited in the fall of 2008, fall of 2009, and fall of 2010. Programs that agreed to enroll in the Evaluation were contacted to enroll children to participate in a fall and spring child assessment. Consent forms for parents as well as a brochure were distributed to all of the programs participating in the Evaluation. Programs were asked to help enroll children into the study by approaching parents of 4 year old children (children who will enter Kindergarten the following fall). Up to six children per child care center/Head Start/or School Readiness program were eligible. Up to two children per family child care home were eligible. Programs were asked to approach families who received a child care subsidy first, then open it up to all families. Programs were also asked to prioritize enrollment to children who are in care at least 20 hours per week and to children still expected to be enrolled in the program the following spring. Programs that did not enroll children receiving a subsidy were given the option of inviting any family to participate in the evaluation, but were still asked to keep the other criteria in mind. It is possible that programs approached families they thought were more likely to participate.

The Evaluation followed up with programs on a regular basis to encourage them to return signed consent forms. If a program was having a low response rate, research staff from the Evaluation team talked to parents directly during pick-up hours or during an already scheduled family event coordinated by the program.

For participating, children received a book and a sticker. The child's teacher was also asked to complete a brief questionnaire about the child's development. The teacher received a $5 Target gift card for completing it.

The child assessment battery, designed by the MELF Research Consortium, consists of a set of direct child assessments as well as two teacher-report assessments. Together, the measures provide a comprehensive look at the domains of school readiness including expressive and receptive language, early literacy skills, early math skills, social and emotional development, and approaches to learning.

Direct Child Assessment Measures. Children's receptive language was measured by the Peabody Picture Vocabulary Test-4th Edition (PPVT-4) (Dunn & Dunn, 2007). The PPVT-4 is a standardized measure, taking age into account, with mean score of 100 and a standard deviation of 15. Children's expressive language was measured by the Individual Growth and Development Indicators – Picture Naming (IGDI). This task measures how many pictures a child can name in

a minute. Early literacy was measured by the Test of Preschool Early Literacy (TOPEL) (Lonigan, Wagner, Torgeson, & Rashotte, 2007) a standardized measure with a mean score of 100 and a standard deviation of 15. Two subtests were administered: Phonological Awareness (breaking up words by sounds) and Print Knowledge (naming letters and sounds). Numeracy and math skills were measured by the Woodcock-Johnson Tests of Achievement (WJ-III): Applied Problems and Quantitative Concepts subtests (Woodcock, McGrew, & Mather, 2001). Applied Problems measures mathematics problem solving including simple counting, addition, and subtraction. Quantitative Concepts assesses knowledge about mathematical factual information (i.e., identifying numbers, shapes, and sequences). The WJ-III is a standardized measure with a mean of 100 and a standard deviation of 15.

Teacher Report Child Assessment Measures. The Social Competence and Behavior Evaluation short form (SCBE-30) is a teacher report consisting of 30 questions that provide an assessment of preschool emotional adjustment and social competence. Three subscales are measured: Social Competence (emotionally mature, pro-social behaviors), Anger Aggression (oppositional behaviors, poor frustration tolerance), and Anxiety Withdrawal (anxious, depressed). Each subscale consists of 10 items rated on a 6 point Likert scale indicating the frequency a child engages in a behavior ranging from 1 = "Never" to 6 = "Always". Each subscale has a total of 60 possible points with higher scores indicating increased behaviors in social competence, anger/aggression, or anxiety/withdrawal (note that lower scores are more desirable in Anger Aggression and Anxiety Withdrawal). The Preschool Learning and Behavior Scale (PLBS) persistence subscale is a teacher report checklist that assesses children's observable approaches to learning, specifically attention/persistence. The PLBS consists of 29 items concerning children's behavior (i.e. "pays attention to what you say") for which teachers mark 1 = "most often applies", 2 = "sometimes applies", or 3 = "doesn't apply". The persistence subscale uses 9 of these items, for a possible total of 27.

Parent Aware Evaluation Parent Interviews, Wilder Research

Parents were asked to complete a phone interview and received a $10 for completing it. Parents of children enrolled in the evaluation were interviewed over the phone in the fall of 2008 (n = 153) and the fall of 2009 (n = 186), and the fall of 2010 (n = 245). Wilder Research conducted the interviews which included items regarding parents' child care selection, usage, and satisfaction, their thoughts on quality, perceptions of Parent Aware, and other child care related questions, in addition to family demographic information.

NACCRRAware, Minnesota Child Care Resource and Referral Network

NACCRRAware is a web-based data system housed by the National Association of Child Care Resource and Referral Agencies. The Minnesota NACCRRAware dataset contains a list of all licensed Head Start/Early Head Start, center-based, preschool, and family child care programs in the state of Minnesota. It also contains information on the following variables discussed in this report: Geographical location (by Parent Aware pilot area, county, or city), child enrollment, programs serving children receiving CCAP, programs serving ELL children, accreditation status, program affiliations, hours of care, turnover, and weekly rates charged by age group for each program. Accreditation status is updated twice a year (in late June and in December), rates

information is updated once a year (April), and programs are added to the dataset on an ongoing basis. An updated dataset is sent to Child Trends quarterly. Data presented in this report represent information for a specific point in time, which is noted in each table. This data was downloaded from NACCRRAware in June 2011.

Quality Improvement Support Expenditures, Minnesota Child Care Resource and Referral Network

The Minnesota Child Care Resource and Referral Network staff provided Child Trends with information on Quality Improvement Supports used by Parent Aware programs as overseen by Provider Resource Specialists. This information was sent to Child Trends in an Excel file on August 8, 2011.

Provider Resource Specialist Data

Provider Resource Specialists were asked to provide detailed information about the supports provided in preparation for each of the ratings issued on or after January 1, 2011. These data include information about the supports provided by Provider Resource Specialists to 83 full ratings across 34 center-based programs and 49 family child care providers.

ERS Consultation Data

First, the Minnesota Department of Human Services hired a consultant to assemble a record of ERS consultation provided per rating cycle using data that was collected for the FY2008, FY2009 and FY2010 annual report of the Professional Development System. Second, ERS Consultants were asked to provide detailed information about the supports provided in preparation for each of the ratings issued on or after June 1, 2010. These combined data include information about the ERS consultation provided to 83 full ratings of 77 unique programs (29 center-based programs and 48 family child care providers).

CLASS Coaching Data

CLASS coaches were asked to provide detailed information about the supports provided in preparation for each of the ratings issued on or after July 1, 2010. According to the CLASS coaches, there have been 13 cycles of CLASS coaching delivered to 13 center-based programs since CLASS coaching was first offered in 2010.

Parent Aware Rating Tool Database, Minnesota Department of Human Services

The Minnesota Department of Human Services houses the Parent Aware Rating Tool (PART) database, which contains all Parent Aware programs, their star ratings, points earned for each quality indicator that makes up the star rating, pilot area, and other program information. Data from PART was used to provide the number of programs rated by pilot area and star rating and all information concerning rating points for this report. All data was downloaded from the PART website in September 2011.

Environment Rating Scales Data System, Center for Early Education and Development, University of Minnesota

The Environment Rating Scales data (ECERS-R, ITERS, and FCCERS) are collected and entered into the Environment Rating Scales Data System by the Center for Early Education and Development (CEED) at the University of Minnesota. The CEED data file is stored on a server at the University of Minnesota and was received by Child Trends on July 11, 2011. Observational data collected in programs are directly recorded in the Branagh ERS software system which has been specifically adapted for the Parent Aware pilot.

Environment Rating Scales Extension (ECERS-E), Center for Early Education and Development, University of Minnesota

The ECERS-E data are also collected by CEED and scoring sheets are stored on the University of Minnesota server. Child Trends accesses the scoring sheets and enters the data into an Excel file.

Classroom Assessment Scoring System (CLASS) data, Center for Early Education and Development, University of Minnesota

The Classroom Assessment Scoring System (CLASS) data are collected and entered into an Excel file by CEED. The CEED data file is stored on a server at the University of Minnesota and was received by Child Trends on July 11, 2011.