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STRENGTHENING SOCIAL AND
EMOTIONAL HEALTH

Rochester Early Childhood Assessment Partnership 2011-2012 Fifteenth Annual Report

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We thank the teachers, parent group leaders, parent coordinators, directors, and administrators who work closely with thousands of students and their parents. Their personal attention to families contributes greatly to RECAP. These individuals unselfishly contribute information and share their insight with the Assessment Team, which is vital to our continuous improvement system. We would especially like to recognize and thank the teachers who have continued to help us improve the process of collecting and sharing information about the children in RECAP. Their comments and feedback, especially regarding new software and data collection and management technology, have been invaluable.

We thank the thousands of parents who gave time from their busy schedules to share their thoughts and perceptions about their children and on other topics. Without parents, RECAP would not be as complete or comprehensive.

We thank the RECAP Advisory Council for helping us to keep the needs of children and all our partners foremost in our operations, and for its valuable feedback and insights regarding the current goals and activities of our community's early childhood system.

We thank the communications staff of Children's Institute for contributions to this report.

Executive Summary

The Fifteenth Annual RECAP Report presents significant findings that affect our community's young children, their families, and the providers and policymakers who serve them. This report also affirms the importance of having longitudinal findings, as trends and replication of findings are crucial foundations to understanding data and making recommendations.

The results from 2011-12 are largely, but not entirely, consistent with previous years. Rochester continues to hold a preeminent place within pre-kindergarten (pre-k) systems in the United States. Rochester's average annual rating of 6.1 on the Early Childhood Environment Rating Scale, Revised (ECERS-R), an internationally used measure of classroom environmental quality, places the city's pre-k classrooms and programs among the highest independently ranked and reliably documented early childhood classrooms. The national weighted averages range from 4.0 to 4.3. Rochester's pre-k students continue to show significant academic and social-emotional growth during the school year.

RECAP's Major Findings for 2011-2012

RCSD/RECAP Partnership growth

For the 2011-2012 school year, perhaps the most important overall event was the continued growth in the RCSD/RECAP partnership, and, in particular, the combined institutional agility demonstrated by RECAP's issuing of small but influential policy briefs in areas requested by RCSD. These and other reports, composed over short periods of time, directly impacted RCSD's early childhood policy decisions. The evaluation/policy successes of the year demonstrate the productive, mutually beneficial relationship between RECAP and RCSD.

Students

- ❖ In examining the social-emotional adjustment of pre-k pupils in 2011-2012, we observed two very noteworthy results. First, students arrived at preschool in the fall of 2011 with greater developmental delays in **Behavior Control** compared to 2010-2011. Their ability to accept the limitations of the classroom environment and behave appropriately was less developed than previous years' students. Secondly, and encouragingly, during their time in preschool, students made many strides in their social-emotional development and their gains allowed them to move out of the risk pool at a rate comparable to previous years. There are many possible explanations for this. Teacher sensitivity in identifying risk, the focused professional development in risk remediation, or, possibly, random fluctuations of behavior can all have contributed to the decrease in the number of "at-risk" students by the end of the 2011-2012 school year.

- ❖ About 94% of incoming pre-k pupils grew at or above their expected developmental levels as measured by the Classroom Observation Record (COR). Children's academic growth continues to show significant gains by the end of the school year. Children in RECAP show, on average, an estimated 19 months' worth of growth in their *Language & Literacy* skills and their overall cognition and this year, they also showed nearly two years of growth in their *Math & Science* skills.
- ❖ This is the second year of HighScope curriculum implementation in the Rochester City School District and ABC Head Start. While children's *Language & Literacy* scores, as measured by the COR, have seen a slight improvement since the implementation of the curriculum, their *Movement & Music* scores have shown a slight drop. The other domains of the COR remain consistent with past years findings. As teachers and children focus more on literacy skill development, which involves less physical activity in general, there is the possibility that they are losing opportunities to develop musical and motor skills.
- ❖ Student attendance was a focal point for analysis this year and, as expected, it was confirmed that children who spent more time in the classroom were more likely to have greater academic gains as measured by the COR. Interestingly, the Teacher-Child Rating Scale (T-CRS) showed that children's social-emotional behavior control and peer social skills showed fewer gains the more that the child attended class.
- ❖ Only 2.9% of students experienced absolute loss on the COR. While it is unavoidable that some students will exit the pre-k programs at a lower level than when they entered (often due to family tragedy or personal crisis), this year marked the lowest percentage of students to experience absolute loss to date. Historically, this percentage is closer to 5-6%.

Classrooms

- ❖ As noted above, RECAP classrooms in 2011-2012 continued to achieve high levels of quality, with a mean rating of 6.1 on the ECERS-R. This contrasts to averages of 4.0 to 4.3 found in other national studies.
- ❖ Individual classroom scores for the ECERS-R have also been consistently high. Since 2002, no classrooms participating in RECAP have scored below 5.7. There have been a handful of studies reporting some programs reaching or exceeding 6.0, but there have been no rigorous, independent evaluations that we can find where a consistent ECERS-R rating of 6.0 or higher for a whole system has been reported, except by RECAP in Rochester.
- ❖ RECAP ensures reliable observations through its Master Observers. These Master Observers must have a minimum of 10 years' experience in early childhood education, participate in annual training, and meet an inter-rater reliability criterion of 80% agreement prior to conducting any observation. They are then required to maintain a minimum of 80% agreement based on a random sample of 20% of their observations in order to keep their Master Observer status.

- ❖ RECAP continues to recognize teachers with extremely high classroom quality. Twenty-six teachers earned scores of 6.50 or higher for five consecutive years. Classrooms in this category are truly superior.
- ❖ In 2011-2012, RECAP completed the third and final year of the pilot using the Classroom Assessment Scoring System (CLASS). For each of the past three years, a stratified random sample of 30 to 35 classes were chosen to be observed with the CLASS and ECERS-R. The results indicate that the instruments assess different areas of program quality and, together, provided useful insights for professional and program development.

Parents and Families

- ❖ This was the sixth consecutive year that RECAP administered the Family Involvement Questionnaire (FIQ), developed by researchers at the University of Pennsylvania and validated by RECAP. The FIQ allows parents to report the extent of their involvement in their children's education via parent-teacher communication, school involvement, and home involvement. Parent involvement has remained consistent throughout the past six years in RECAP and efforts that have been made to increase the amount of parent involvement have not been successful. Parents continued to be most involved in their child's education at home and least involved in the school environment.
- ❖ Parents' responses to the FIQ have shown that parents report more communication with teachers and involvement with their child's education when their child is misbehaving than when their child is doing well.
- ❖ On the Parent-Child Rating Scale (P-CRS), parents continue to report medium to high scores for their children's social-emotional behavior. However, they also report little change from fall to spring. Regardless of the gains seen by teachers throughout the school year, parents do not perceive these changes in their child at the end of the school year.
- ❖ Children's behavior, as reported by parents, is related to children's performance on the COR. Children, whose parents reported better behavior from their child, were more likely to perform better on the COR. Therefore, it remains important to continue to gather and address parental reports regarding children, as they provide valuable insights into strengths and weakness of each child.

Introduction to RECAP

RECAP began in 1992 as a collaboration of the United Way of New York State, Rochester Area Community Foundation, Rochester City School District, and Children's Institute. Since its inception, one of RECAP's overall guiding tenets has been to promote and ensure quality pre-k classroom experiences with its integrated data system. In addition to providing a data system to enhance children's, teachers' and systems' performance, RECAP works to understand and document the effectiveness of pre-k programs and inform professional development activities. Furthermore, using information to help drive policy has been an important force in the RECAP experience. Throughout its history, RECAP has worked with many partners, including: foundations, local government, public and parochial schools, Head Start, and early education teachers at multiple schools and other community-based organizations.

Each year, RECAP provides important program elements, including:

- ❖ Training teachers in the use of child assessments and rating scales, and in the interpretation of their results
- ❖ Efficient and user-friendly data collection and feedback reports, with reports looped back to teachers and directors, using instant web-based COMET system¹ reports in addition to paper reports
- ❖ Training teachers and observers on fidelity implementation of the Early Childhood Environment Rating Scale, Revised (ECERS-R) and the Classroom Assessment Scoring System (CLASS)
- ❖ Biweekly review and planning meetings
- ❖ Community presentations of RECAP results

These implementation efforts are integrated into a continuous improvement system that strives to ensure and maintain quality pre-k classrooms, and thus improve overall student performance and outcomes.

Consistently, RECAP has tried to employ the best available measures to assess program quality and student outcomes. Throughout RECAP's history, the ECERS-R was used to study classroom quality. In addition to the ECERS-R, a third year of the CLASS was piloted with the remaining 35 RECAP classrooms that had not already been assessed. CLASS results of the 95 classrooms that have participated over the last three years are reported.

¹ COMET is a web-based data collection and management system created by Children's Institute, Inc. and SophiTEC, Inc.

To measure student competencies and difficulties within both academic and social/emotional domains, the Child Observation Record (COR) and the Teacher-Child Rating Scale (T-CRS) were used. To understand the parent's involvement with his or her child's pre-k classroom and perspective of his or her child's development, the Family Involvement Questionnaire (FIQ) and Parent-Child Rating Scale (P-CRS) were completed by parents. The following table summarizes the measures collected and the numbers assessed during the 2011-2012 school year.

Table 1. RECAP Outcomes and Measures

RECAP 2011-2012 Outcomes and Measures			
Outcome	Measures	Numbers Assessed* in 2011-2012	Method
Classroom Environment Quality	ECERS-R	89	Classroom Observation
Classroom and Teacher Interactions	Classroom Assessment Scoring System (CLASS)**	35	Classroom Observation
Academic, Motor, and Social	Child Observation Record (COR)	2,087	Teacher Report
School, Emotional, and Behavioral Adjustment	Teacher-Child Rating Scale (T-CRS)	2,090	Teacher Report
Parent Involvement	Family Involvement Questionnaire (FIQ)***	1,568	Parent Survey
Social, Emotional, and Behavioral Adjustment	Parent-Child Rating Scale (P-CRS)	1,592	Parent Survey

*Numbers assessed are not necessarily the number of participants; i.e., there were 148 classrooms this year and 89 classrooms assessed with ECERS-R. Teachers with both a.m. and p.m. classrooms were assessed once. 26 teachers were exempt, as they had performed at the 6.50 level or above for 5 consecutive years.

**Third year of pilot, total sample for three years = 95

***Third year of pre and post assessments

Table 2 presents demographic information regarding the students in RECAP classrooms.

Table 2. RECAP Student Demographics

RECAP 2011-2012 Student Demographics		
Gender	Male	51%
	Female	49%
Race/Ethnicity	Black/African American	60%
	White Caucasian	13%
	Hispanic/Latino	22%
	Asian	2%
	Native American	<1%
	Other	<1%

As in previous years, this RECAP Report of the 2011-2012 school year presents the major findings of classroom quality and students' outcomes. For example, the ECERS-R averages for RECAP classrooms are presented here, while individual classroom results and detailed descriptions of the assessment instruments and analyses are provided in the Statistical Supplement.

In prior years, the RECAP reports included many statistical findings, such as inter-rater reliability on the ECERS-R and alpha reliability on the scales of the student outcome measures. As these may not be of general interest, they too have been moved to the Statistical Supplement.

Program Quality – ECERS-R

Beginning with the 1998-1999 school year, 14 years ago, RECAP assessed the environmental quality in pre-k classrooms using the Early Childhood Environmental Rating Scale – Revised (ECERS-R) (Harms, Clifford, & Cryer, 2005). Since then, thanks to the ongoing professional development provided by RECAP and its participating programs, and the significant individual work by teachers, RECAP has reported that almost all four year old classrooms in Rochester have better than “good” (≥ 5.0) quality as measured by the ECERS-R. Additionally, almost half have performed in the superior range (6.25- 7.0) for over 5 years in a row. Over the last ten years, classroom ratings have had an overall average rating on the ECERS-R of “very good” (around 6.0).

The ECERS-R consists of 43 items organized into seven subscales: *Space and Furnishings*, *Personal Care Routines*, *Language-Reasoning*, *Activities*, *Interaction*, *Program Structure*, and *Parents and Staff*. Together the items and scales assess a classroom’s quality.

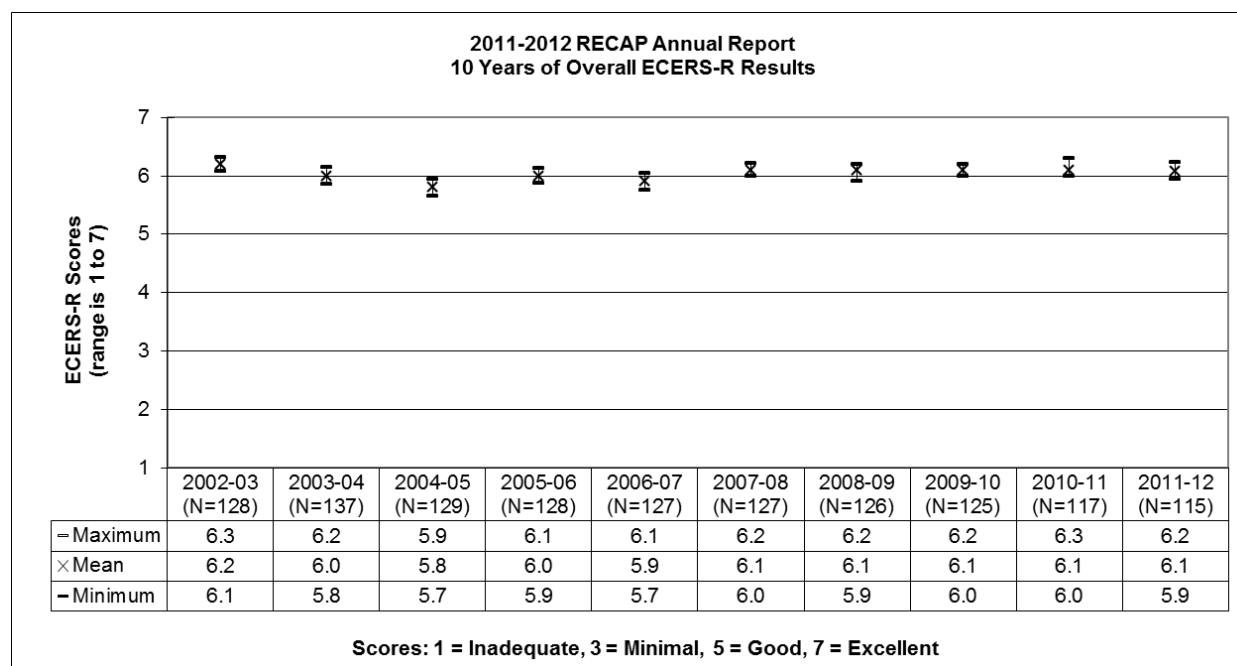
As explained in prior years’ reports, in 2007-2008 the RECAP system implemented a program change, which allowed RECAP teachers to earn exemption from the annual ECERS-R assessment. To earn this “exempt” designation, teachers had to obtain an average ECERS-R score of at least 6.5 for five consecutive years. Because of the “exempt” teacher status, some of the tables and charts that follow will have results for the exempt classrooms for which the ECERS-R was not collected in 2007-2008, 2008-2009, 2009-2010, or 2010-2011. In these instances, we provide the 5-year average score for the exempt group. In 2011-2012, there were 26 exempt teachers/classrooms. Teachers who completed the three-year exemption period were required to have an ECERS-R observation and could obtain “re-exemption” if they maintained an average score of 6.5 or higher. The observation scores obtained at re-exemption are then used for those teachers for the duration of the three-year re-exemption period following the observation. Only one teacher was up for re-exemption for the 2011-2012 school year and achieved the required score for re-exemption.

In prior years’ reports, we included results on the statistical integrity of ECERS-R in this section, with the results from the tabulation of the inter-rater reliability of observers. This information was collected and computed for the 2011-2012 school year, and, as in prior years, high inter-rater reliabilities are noted. These results are reported in further detail in the Statistical Supplement.

ECERS-R Aggregate Results for 2002-2012

The 10-year aggregate ECERS-R results from RECAP demonstrate how this system has served as a quality barometer for the pre-kindergarten program in Rochester. The 10-year average (mean) score on the ECERS-R assessment is 6.0. For 2011-2012, the mean score was 6.1. Figure 1 depicts the most recent ten years of ECERS-R findings. Classroom quality has been integrated into the pre-k infrastructure, and, as assessed by the ECERS-R, is within the very good to excellent range.

Figure 1. Ten Years of Overall ECERS-R Results

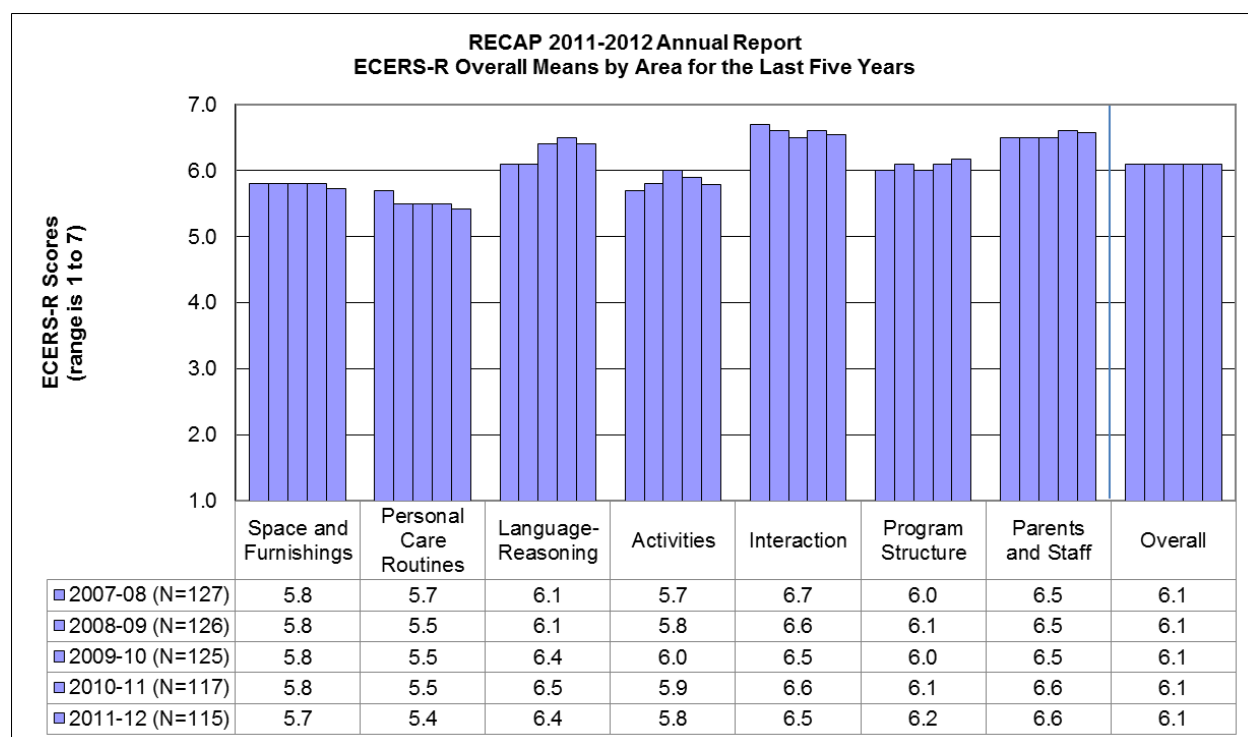


ECERS-R Overall Means by Area, a Five-Year Historical Perspective

For the 2011-2012 school year, the mean ECERS-R score was 6.1, across the 115 classrooms. Figure 2 illustrates the general stability across the seven areas for the past five years. Starting with the 2007-2008 year, both exempt and non-exempt teachers' performance is included in the grouping. As in prior years, the strongest areas are *Parents and Staff* and *Interaction*.

After a two-year increase in *Language-Reasoning*, this year showed a slight decrease, but remained strong. *Personal Care Routines* remains the weakest, though these items still fall within the “good” range. Additionally, four of the seven areas (*Language-Reasoning*, *Interaction*, *Program Structure*, and *Parents and Staff*) have mean ratings of at least 6.0, showing consistent strength. The areas of *Parents and Staff* and *Interaction* both have very high overall averages. The remaining three, *Space and Furnishings*, *Activities*, and *Personal Care Routines*, while not as strong, still have scores falling within the “good” to “very good” range.

Figure 2. ECERS-R Overall Means by Area for the Last Five Years

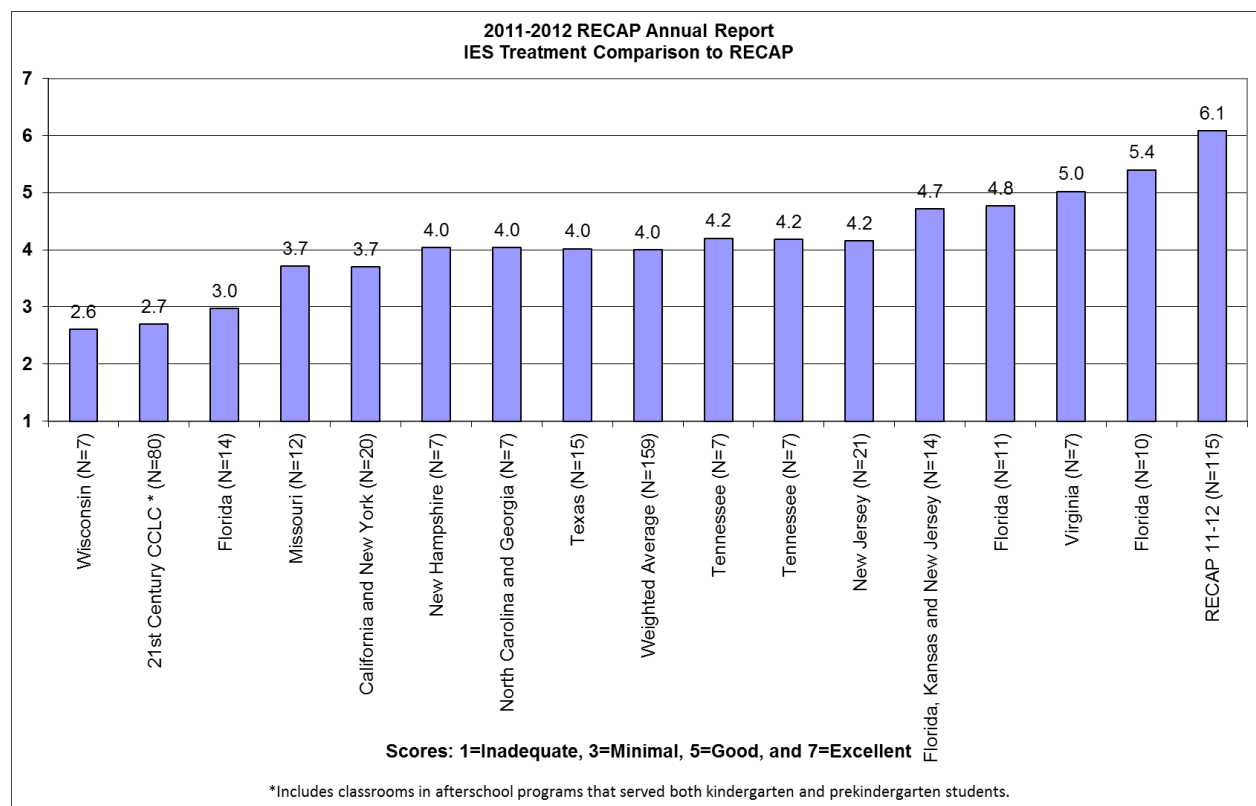


Comparing RECAP to Other Early Childhood Education Assessments Across the United States

RECAP continues to provide the pre-k programs in Rochester with information needed by pre-k teachers to instill and to maintain a range of very good to excellent standards of quality. As a comparison with other programs' quality, we report the findings from the U.S. Department of Education Institute of Education Sciences (IES) *“Effects of Preschool Curriculum Programs on School Readiness.”* In its report, IES presents findings from its multi-site, multi-curriculum evaluation. Fourteen different pre-kindergarten curricula were randomly assigned to treatment and control classrooms; ECERS-R assessments were conducted on these preschool classrooms in 13 states in the 2003-2004 school year.

Presented here are the ECERS-R results, showing data collected in the spring, as in the RECAP model, from the treatment classrooms (Preschool Curriculum Evaluation Research Consortium, 2008). The findings from this IES report show variability across the treatment programs; the results range from 2.6 to 5.4. The most recent five years of the RECAP program, in comparison, have seen a quality rating mean of 6.1 for each year.

Figure 3. IES Treatment Comparison to RECAP



Program Quality – CLASS Pilot

Classroom Assessment Scoring System (CLASS) Pilot

Cumulatively over the past three years, RECAP piloted the Classroom Assessment Scoring System (CLASS) (Pianta, et al., 2008) with 95 separate Rochester City School District (RCSD) Department of Early Childhood Education Universal Prekindergarten teachers and classrooms in 2009-2010 (n=30), 2010-2011 (n=30), and 2011-2012 (n=35). The pilot was implemented because the RECAP Assessment team, school district administrators, and teachers desired more information to help them understand the different factors that influence the effectiveness of pre-kindergarten instruction and learning. Howes, Burchinal, Pianta, Bryant, Early, Clifford & Barbarin (2008) found the following:

Teacher-child relationships that provide young children with a sense of acceptance and security and through which teachers and children are actively involved with one another are more likely to support engagement in and cooperation with the activities and instruction provided by the teacher.

In general, the CLASS assesses the climate provided by the teacher, the nature of the relationships in the classroom, and the quality-of-feedback loop.

CLASS Master Observer Training

In July 2009, six observers successfully completed CLASS Master Observer Training. They became the first cadre of Master Observers of the CLASS tool to conduct observations in RECAP. These Master Observers participated in a rigorous three-day training program to attain or exceed the level of reliability specified by the authors of the CLASS (.80). Training materials provided observers with a clear and comprehensive understanding of the instrument's purpose and procedures. Trainees watched multiple videotaped segments that were consensus coded by at least three master CLASS coders. The consensus ratings established a standard by which to judge the accuracy of ratings made by trainees. At the end of training, trainees took an online reliability test in which they watched and coded classroom segments. In addition to in-depth training on the CLASS received by the Master Observers, the logistics of the observation process and the observation guidelines and protocol were studied carefully.

Pilot Status

As noted above, during 2011-2012 a third and final cohort was selected using the 35 remaining teachers and classrooms who participated in RECAP but had not yet been selected in either of the previous two school years to receive CLASS observations. Over the last three school years, these assessments were administered with twenty-five classrooms (26%) receiving two assessments by two master observers so that inter-rater reliability could be calculated ($\text{Agreement}/(\text{Agreement}+\text{Disagreement}) \times 100 = 76.4\%$). Further information on the inter-rater reliability assessments is provided in the Statistical Supplement. Presented below are the descriptive statistics and correlational findings of the three-year CLASS pilot

CLASS Three-Year Results

Specifically, the CLASS assesses three empirically derived domains: *Emotional Support*, *Classroom Organization*, and *Instructional Support* (Pianta et al., 2008). Like other observational tools used in early childhood, CLASS items are rated on a 1-to-7 scale, with 1 indicating the item being rated is minimally characteristic, and 7 that it is highly characteristic.

For RECAP classrooms the mean scores in both the *Emotional Support* and *Classroom Organization* domains were in the mid-5 range and for *Instructional Support* the mean score was in the mid-3 range. RECAP classroom performance in all three domains was notably and statistically higher than those preschool and kindergarten programs reported in the Technical Appendix of the CLASS Manual, which reports the results of 164 Virginia preschool classrooms (Pianta, et al., 2008). Table 3 shows CLASS domain and subdomain scores from RECAP classrooms. *It is clear that RECAP teachers could benefit from increased professional development in the Instructional Support domain.*

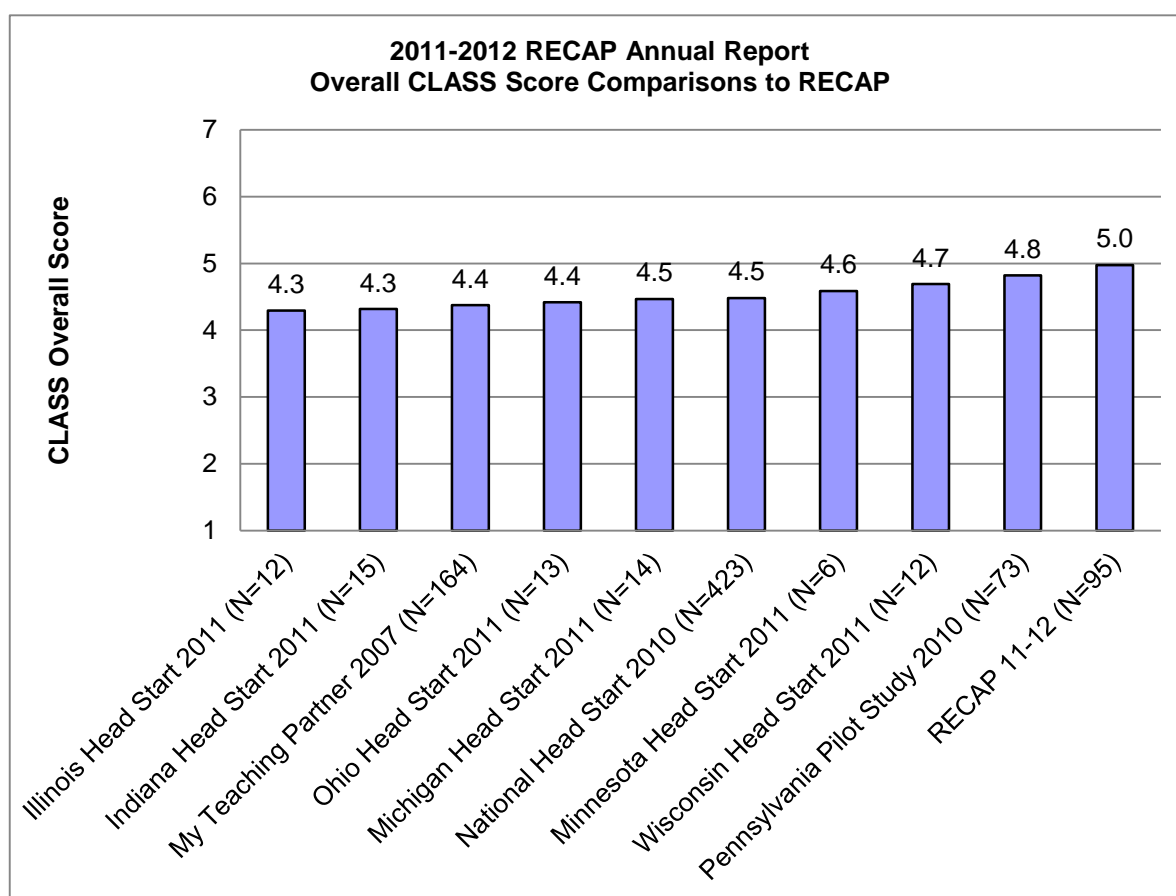
Table 3. CLASS Means by Subdomain

2011-2012 RECAP Annual Report RECAP CLASS Means by Subdomain (N=95)					
		RECAP Pilot		MTP	
Domain	Subdomain	Mean	Std. Dev.	Mean	Std. Dev.
<i>Emotional Support</i>	Positive Climate	6.0	0.8	5.2	0.9
	Negative Climate*	6.8	0.4	6.4	0.7
	Teacher Sensitivity	5.7	0.9	4.3	0.9
	Regard for Student Perspective	5.5	0.8	4.4	1.0
<i>Classroom Organization</i>	Behavior Management	5.7	0.9	4.9	0.9
	Productivity	5.9	0.8	5.4	0.8
	Instructional Learning Formats	5.0	0.9	4.6	0.8
<i>Instructional Support</i>	Concept Development	3.2	1.3	2.7	0.7
	Quality of Feedback	3.5	1.3	2.9	0.9
	Language Modeling	3.6	1.3	2.9	0.7
<i>Total</i>	All Subdomains	5.0	0.7	4.4	0.8
* Rekeyed so that higher value indicates better functioning					
**All comparisons of the CLASS pilot and of the My Teaching Partner results were statistically significant at the p<.01 level					

Comparing RECAP to Other CLASS Assessments Across the United States

Figure 4 shows a side-by-side comparison of CLASS overall means for RECAP with the CLASS results from several other programs, including Head Start sites in Illinois, Indiana, Ohio, Minnesota, Michigan, Wisconsin and a national average of all Head Start programs (Sullivan, Williams, Lacey-Ward, & Burns, 2011), My Teaching Partner sites in Virginia (Pianta et al., 2008), and pre-k classrooms across the state of Pennsylvania (Philson, 2011). These results indicate little variability across programs; the CLASS means range from 4.3 to 4.8 with a median of 4.5; RECAP classrooms have a significantly higher mean of 5.0.

Figure 4. CLASS - Classroom Assessment Scoring System Comparisons



CLASS Correlations with COR, T-CRS, and FIQ Domains

This year, a variety of relationships were investigated between the three CLASS domains and the primary domains of the COR (n=4), T-CRS (n=4) and the FIQ (n=3). It was hypothesized that higher scores on the CLASS domains would be associated with children having a greater amount of growth on the COR and T-CRS domains and no difference in growth on the FIQ domains, as the FIQ represents family involvement and not classroom functioning.

As Table 4 shows, all three of the CLASS dimensions were positively and significantly correlated with the children's growth on each of the four COR domains. *The higher the classroom CLASS scores, the greater the students' gains in performance, as measured by the COR.*

The CLASS **Classroom Organization** domain had small, but significant, correlations with three of the T-CRS domains: **Behavior Control**, **Assertiveness**, and **Peer Social**. There was also a positive correlation between **Instructional Support** and **Assertiveness**. All other correlations for the T-CRS and the CLASS were too weak to be significant. None of the domains on the FIQ were significantly correlated with the CLASS domains.

It is interesting that there were significant relationships between the CLASS **Classroom Organization** domain and gains in social and emotional functioning as measured by the T-CRS, but there were no significant relationships between the CLASS **Emotional Support** domain and social and emotional functioning. Further discussion and analyses are required to determine why. In sum, there was a small significant relationship between classrooms' organization and improvements in children's behavioral functioning – *the better the classrooms' organization the greater the gains in social and emotional functioning.*

Table 4. CLASS Dimension and COR, T-CRS and FIQ Domain Correlations

2011-2012 RECAP Annual Report					
CLASS Dimension Correlations with Change Scores					
		N	<i>Emotional Support</i>	<i>Classroom Organization</i>	<i>Instructional Support</i>
COR Domains	<i>Initiative & Social</i>	483	.30**	.31**	.29**
	<i>Language & Literacy</i>	472	.27**	.27**	.28**
	<i>Math & Science</i>	453	.28**	.27**	.31**
	<i>Movement & Music</i>	481	.32**	.35**	.33**
T-CRS Domains	<i>Task Orientation</i>	447	.07	.09	.07
	<i>Behavior Control</i>	447	.08	.11*	.05
	<i>Assertiveness</i>	447	.09	.11*	.09*
	<i>Peer Social</i>	447	.07	.14**	.07
FIQ Domains	<i>Parent-Teacher Communication</i>	87	.15	.15	.10
	<i>School Involvement</i>	87	.01	.08	-.03
	<i>Home Involvement</i>	86	-.06	-.03	.12
*Significant at p<.05 level					
** Significant at p<.01 level					

CLASS Correlations with ECERS-R

Based on the thorough review of the ECERS-R and CLASS domains and the last two year's preliminary results (Taylor, Hightower, MacGowan, Van Wagner, Brugger, & Lotyczewski, 2011; Taylor, Lehmann, Reynolds Weber, Hightower, MacGowan, Van Wagner, & Brugger, 2010), which suggested that the CLASS and ECERS-R assess different domains, it was hypothesized that there would be relatively few significant correlations between the classroom domains as measured by the CLASS and the ECERS-R.

Of the 24 correlation coefficients, only three were found to be statistically significant. There were moderate and statistically significant relationships between the ECERS-R *Program Structure* subscale and the CLASS *Emotional Support* and *Instructional Support* domains. Similarly, the ECERS-R *Total* related significantly to the CLASS *Instructional Support* domain. The CLASS *Classroom Organization* domain did not relate significantly to any ECERS-R scale.

In general, the hypothesis above was supported suggesting that the domains assessed by the ECERS-R and CLASS are, for the most part, independent. The overlap that does exist between these two measures is relatively small. For example the largest correlation between ECERS-R Total and the CLASS Instructional Support was $r=.30$, which represents 9% ($(.30)^2$) common variance between these two domains. Continued use of both observational measures is warranted as long as the domains assessed by these tools are considered programmatically important to young children's development.

Table 5. CLASS Dimension and ECERS-R Subscale Correlations

2011-2012 RECAP Annual Report								
CLASS Dimension and ECERS-R Subscale Correlations (N=95)								
CLASS	ECERS-R							
	<i>Space</i>	<i>Routines</i>	<i>Language</i>	<i>Activities</i>	<i>Interactions</i>	<i>Program Structure</i>	<i>Parents</i>	<i>Total</i>
<i>Emotional Support</i>	.08	.13	.18	.18	.07	.27**	.09	.20
<i>Classroom Organization</i>	.03	.13	.06	.14	.08	.19	.12	.15
<i>Instructional Support</i>	.17	.23	.22	.23	.24	.29**	.20	.30**

** Significant at the $p<.01$
 Note: At $p<.05$ the correlations between the ECERS-R subscales of *Routines*, *Language*, *Activities*, *Interactions*, and *Parents* and the CLASS *Instructional Support* domain were significant, but were omitted from discussion to control for Type 1 error.

Student Performance

Child Observation Record (COR)

RECAP used the COR to measure academic (language, literacy, mathematics, science), social, and motor competencies during the child's pre-k year. The COR was created by HighScope, a center for developing and evaluating materials that teach and assess young children. UPK Teachers use the COR to record their observations of their students' functioning on 32 items. Each item is scored on a 5-point developmentally sequenced scale where each point represents a level of children's growth along a development continuum (Hightower, Gramiak, Metzger, & Forbes-Jones, 2006).

Teachers completed the COR in the fall and spring. By administering the COR at these two times, the growth of the individual child is assessed, and, where a problem area exists, teachers can address it in the classroom. Furthermore, by aggregating the data, the growth rates can be assessed by gender and race, and for the entire RECAP sample. Growth rates are also studied based on risk factors. The COR results presented in this section, as well as in the Statistical Supplement, are integral to understanding pre-k program effectiveness.

Teachers complete the COR on their students using the COMET online application that tabulates and processes the data and produces child summary reports almost instantly. These reports show the average raw and percentile scores in four skill areas. The individual items in their respective skill areas are:

- ❖ ***Initiative & Social:***
 - Making choices and plans
 - Solving problems with materials
 - Initiating play
 - Taking care of personal needs
 - Relating to adults
 - Relating to other children
 - Resolving interpersonal conflict
 - Understanding and expressing feelings

- ❖ ***Language & Literacy:***
 - Showing awareness of sounds in words
 - Using letter names and sounds
 - Reading
 - Writing
 - Counting

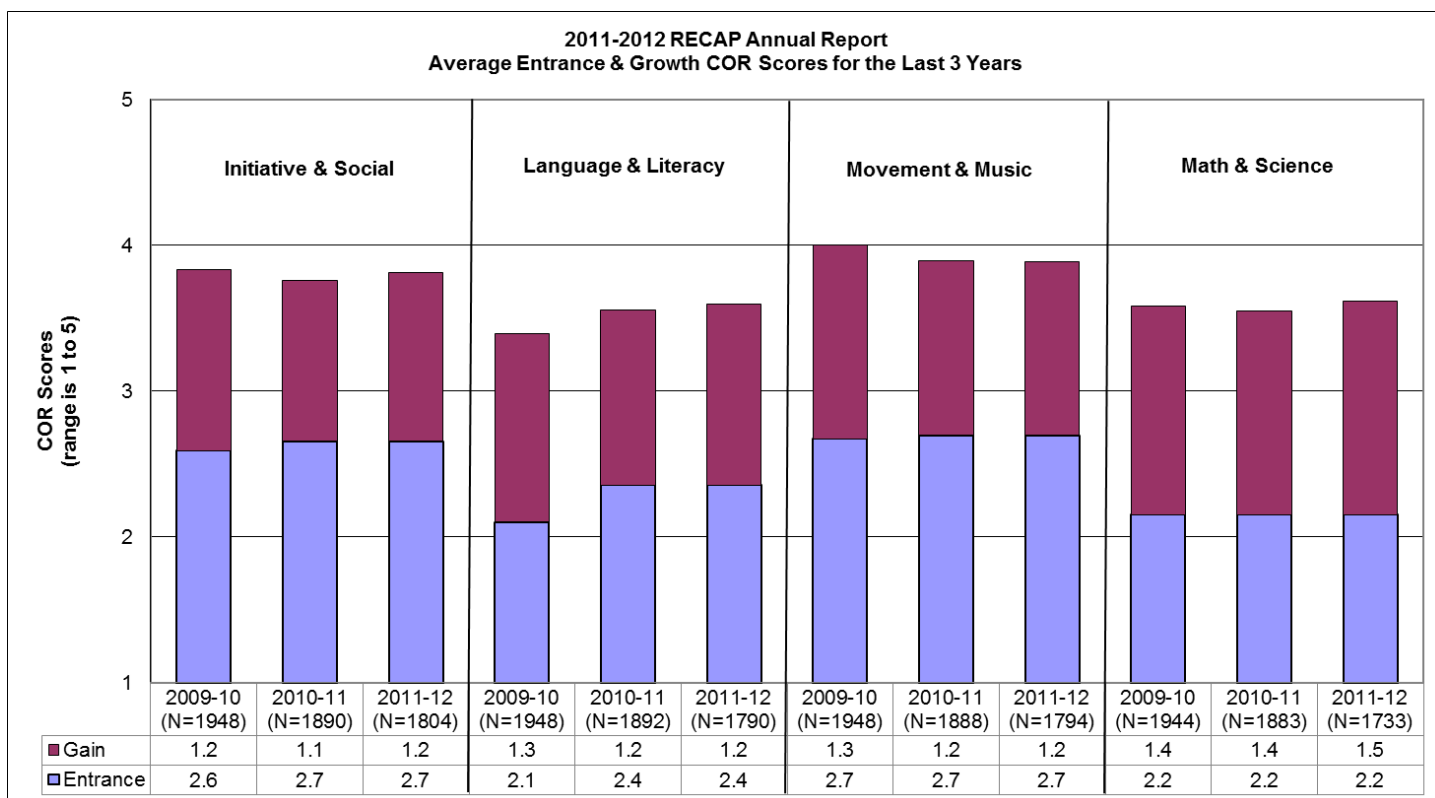
- ❖ ***Movement & Music:***
 - Moving in various ways
 - Moving with objects
 - Feeling and expressing steady beat
 - Moving to music
 - Singing

- ❖ ***Math & Science:***
 - Comparing properties
 - Identifying position and direction
 - Identifying sequence change and causality
 - Identifying materials and properties
 - Identifying natural and living things

The following text and figure depict the growth of the RECAP students on the COR for the entire cohort for the 2011-2012 school year; in the Statistical Supplement additional analyses are presented by gender and race/ethnicity.

In Figure 5, the COR Fall 2011 results are presented with the means reported for each of the academic subscales. Also shown are the COR Spring scores and growth scores (change from fall to spring) for the last three years. Children gained significant skills as measured by the COR during their time in pre-k. Overall, at Time 1, the mean scores ranged from 2.2 to 2.7, and the mean change scores ranged from 1.2 to 1.5.

Figure 5. Average Entrance and Growth COR Scores for the Last 3 years



Starting in 2010-2011, RECAP resumed administration of the 32-item COR in the fall and spring. This change was requested by administrators for the purpose of tracking student performance and informing individualized student planning, which is part of the HighScope curriculum.

As noted in the above figure, growth on the COR dimensions remains the same as previous years.

Teacher-Child Rating Scale (T-CRS)

The T-CRS consists of 32 items that assess both positive and negative aspects of a child's social-emotional performance. Items are grouped into four empirically derived subscales: 1) *Task Orientation*, 2) *Behavior Control*, 3) *Assertiveness*, and 4) *Peer Social Skills*.

The T-CRS has multiple uses, including as a screening measure, as part of an individual assessment battery, and as a pre- and post-research or evaluation measure. With RECAP, it also serves as a tool to track population trends, changes, and effects of pre-k programs in Rochester. Table 6, below, compares initial at-risk status (at or below the 15th percentile, approximately 1 standard deviation), as measured by the fall administration of the T-CRS, for the 2010-2011 and 2011-2012 RECAP program years.

In order to identify if there were any significant changes in the percentage of children who are “at-risk” in one or more of the subdomains at the beginning of the school year, a series of chi-square tests were run. These tests were used to determine if the fluctuations in percentages are within an expected amount of change from year to year or not. The results showed that the only statistically significant change was the decrease in the number of children who were at-risk in the *Behavior Control* domain. *Compared to 2010-2011, in 2011-2012 more children entering preschool were observed to be delayed in their development of behavior control skills. A greater number of children had difficulty dealing with the limitations placed upon their behavior in the classroom environment upon starting preschool this year. This too suggests a possible need for future professional development—helping children with self-control issues.*

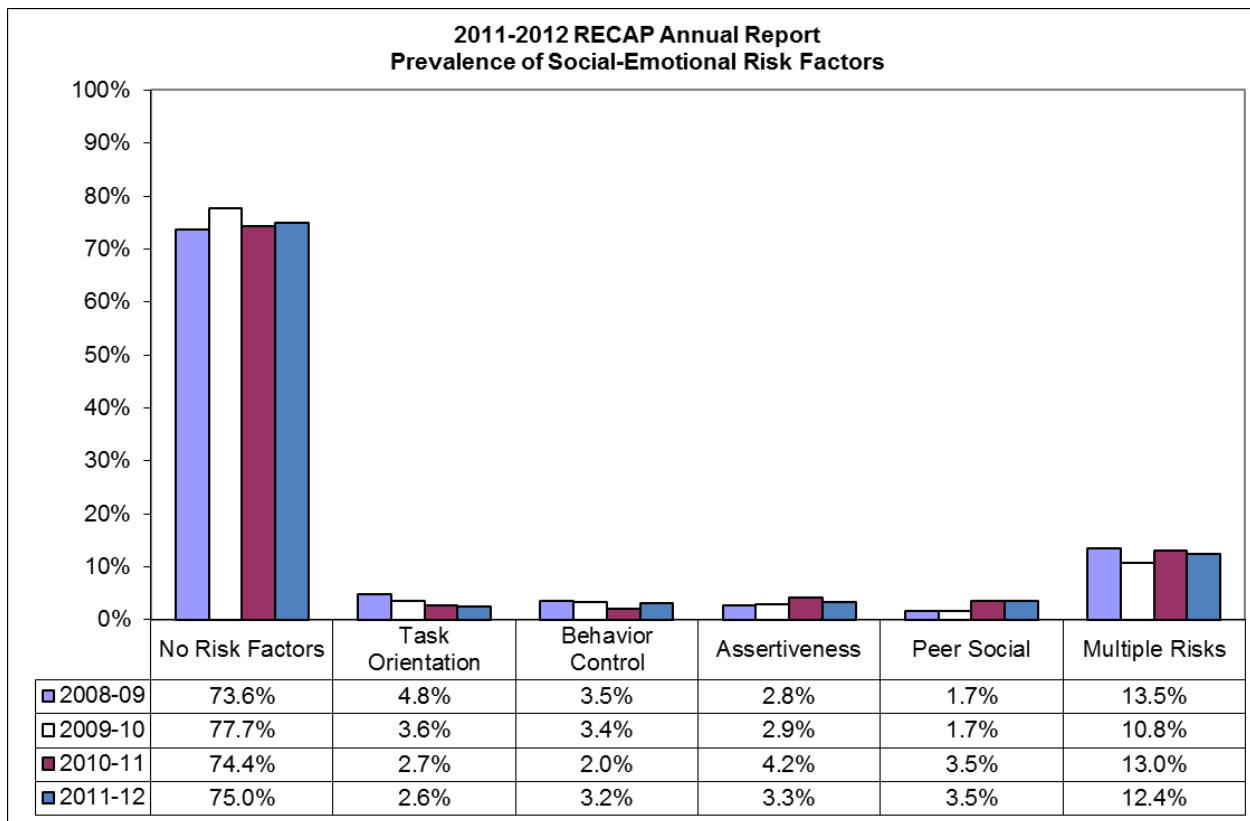
Table 6. Social-emotional risk factors for the past two years at Time 1

2011-2012 RECAP Annual Report					
Students with Social-Emotional Risk Factors at Time 1					
	2010-11		2011-12		Chi Square
	Frequency	Percentage ⁺	Frequency	Percentage ⁺	
No risk factors	1,494	74.4%	1,391	75.0%	0.12
<i>Task Orientation</i> risk only	54	2.7%	48	2.6%	0.04
<i>Behavior Control</i> risk only	41	2.0%	59	3.2%	4.93*
<i>Assertiveness</i> risk only	84	4.2%	61	3.3%	2.16
<i>Peer Social</i> risk only	70	3.5%	65	3.5%	0.98
Multiple risk factors	261	13.0%	230	12.4%	0.33
Number of valid responses	2,008	-	1,854	-	
⁺ Percentage is calculated from number of valid responses * Scores are statistically different (p<.05)					

For 2011-2012, the T-CRS was completed for 1,854 students. As shown in Figure 6 below, the rates for all of the groups (no risk factors, and single or multiple risk factors) have remained relatively consistent for the last four years for the students attending RECAP-affiliated pre-k programs.

Combining the single-risk rates from each of the four groups shows that the grouped individual risk factor is approximately 11 to 12 percent. This has also been consistent for the last four years.

Figure 6. Prevalence of Social-Emotional Risk Factors at Entrance



Rochester UPK Students

Table 7 below shows risk factors specifically for the Universal Prekindergarten (UPK) program for the COR between fall and spring data collection points. By the end of the school year, over 95% of UPK students had no risk factors on the COR. Chi-square tests were run to determine if there was a significant difference in the numbers of at-risk students from the beginning of the 2011-2012 school year to the end of the year. For each COR domain, the number of children who were at risk decreased significantly. There was also a significant decrease in the number of children who had multiple risks upon exiting pre-k. *Through their teachers' efforts and their developmental growth, a significant number of the children who were considered at-risk at the beginning of the year were able to make strides in their academic and social skills to the point where they were no longer considered to be at-risk in these categories at the end of the school year.*

Table 7. 2011-2012 Rochester UPK Students COR

2011-2012 UPK SED Annual Report Rochester UPK Students COR Risk Factors (Below 15th Percentile; ~1 SD)				
	Pre (N=1,501)		Post (N=1,779)	
	N	%	N	%
No Risks	1,138	75.8%	1,694	95.2%
Risks				
<i>Initiative & Social</i>	190	12.7%	39	2.2%
<i>Language & Literacy</i>	167	11.1%	48	2.7%
<i>Movement & Music</i>	167	11.1%	46	2.6%
<i>Math & Science</i>	202	13.5%	39	2.2%
Risks				
Single Subscale	165	11.0%	34	1.9%
<i>Initiative & Social</i>	40	2.7%	4	0.2%
<i>Language & Literacy</i>	27	1.8%	12	0.7%
<i>Movement & Music</i>	21	1.4%	10	0.6%
<i>Math & Science</i>	77	5.1%	39	2.2%
Multiple Subscales	198	13.2%	51	2.9%
Two Risks	84	5.6%	27	1.5%
Three Risks	63	4.2%	12	0.7%
Four Risks	51	3.4	12	0.7%

The UPK program risk factors for the T-CRS are shown in Table 8 below for the fall and spring of the 2011-2012 school year. 82% of UPK students had no risk factors on the T-CRS upon exiting pre-k. Chi-square tests were run to determine if there was a significant difference in the numbers of at-risk students from the beginning of the 2011-2012 school year to the end of the year. The number of children who were at risk for developmental delays in *Assertiveness* or who were at-risk for multiple T-CRS domains decreased significantly, improvement. *Consistent with the findings comparing Assertiveness from last year to this year, children who are at-risk at the beginning of the year improved by the end of the year and were no longer considered to be at-risk.*

Table 8. 2011-2012 Rochester UPK Students T-CRS

2011-2012 UPK SED Annual Report				
Rochester UPK Students				
T-CRS Risk Factors (Below 15th Percentile)				
	Pre (N=1,501)		Post (N=1,700)	
	N	%	N	%
No Risks	1,146	76.3%	1,397	82.2%
Risks				
<i>Task Orientation</i>	156	10.4%	132	7.8%
<i>Behavior Control</i>	138	9.2%	118	6.9%
<i>Assertiveness</i>	118	7.9%	49	2.9%
<i>Peer Social</i>	197	13.1%	182	10.7%
Risks				
Single Subscale	181	12.1%	175	10.3%
<i>Task Orientation</i>	41	2.7%	45	2.6%
<i>Behavior Control</i>	46	3.1%	38	2.2%
<i>Assertiveness</i>	48	3.2%	21	1.2%
<i>Peer Social</i>	46	3.1%	71	4.2%
Multiple Subscales	174	11.6%	128	7.5%
Two Risks	105	7.0%	81	4.8%
Three Risks	58	3.9%	44	2.6%
Four Risks	11	0.7%	3	0.2%

HighScope Curriculum

The 2011-2012 school year marked the second year of the implementation of the HighScope curriculum in the Rochester City School District and ABC Head Start pre-k classrooms and UPK community-based programs. HighScope Education Research Foundation is an independent, not-for-profit organization that supports child development professionals, educators, and parents assisting children with learning (Epstein, 2007). The HighScope curriculum integrates teaching practices for educators with content that facilitates developmentally appropriate learning for children and is approved as an evidenced based curriculum by the NY State Education Department.

This curriculum emphasizes active participatory learning, adult-child interaction, and the plan-do-review process (Marshall, Lockhart, & Fewson, 2007). Active participatory learning refers to an approach where children are “active learners” through child-based learning that is supported by the teacher and materials as students manipulate their environment. Adult-child interaction is a partnership between teacher and child that allows both child-appropriate decisions within the classroom and a supportive climate for teachers to guide, nurture, and respond to students. The plan-do-review process is part of the HighScope daily routine when children meet in a small group with the teacher during planning time to decide what they would like to do during work time. After work time, when the children have participated in the activities they planned, the small group comes back together with the teacher for recall time where students share what they did and what they learned.

As noted in Figure 7 below, COR growth and exit scores have remained relatively consistent across the last 6 years. All four of the subscales showed an increase from last year to this year. However, as indicated by the effect size calculation, the effect sizes are small and the change scores from year to year, as noted above, are almost identical. Table 9 provides a side-by-side comparison of the combined results of the COR growth scores from the 4 years prior to the implementation of the HighScope curriculum and the results of the combination of the scores of the 2 years following the implementation of the curriculum. A *t*-test was used to determine if there was a significant difference between the scores prior to the implementation of the HighScope curriculum and scores after the curriculum was in use. The results of the *t*-test suggest that scores for the **Language & Literacy** and **Movement & Music** subscales after the implementation of the curriculum are significantly different ($p < .01$) from those subscale scores of the 4 years prior to the curriculum implementation. *This means that since HighScope has been in use in classrooms, children's Language & Literacy skills have improved significantly. However, children's Music & Movement scores show a slight drop after the implementation of HighScope. The skill levels attained by children at the end of the school year for the past 2 years for the other two domains remained consistent with the levels seen in the 4 years prior.*

Figure 7. Six Years of COR Scores at Time 2

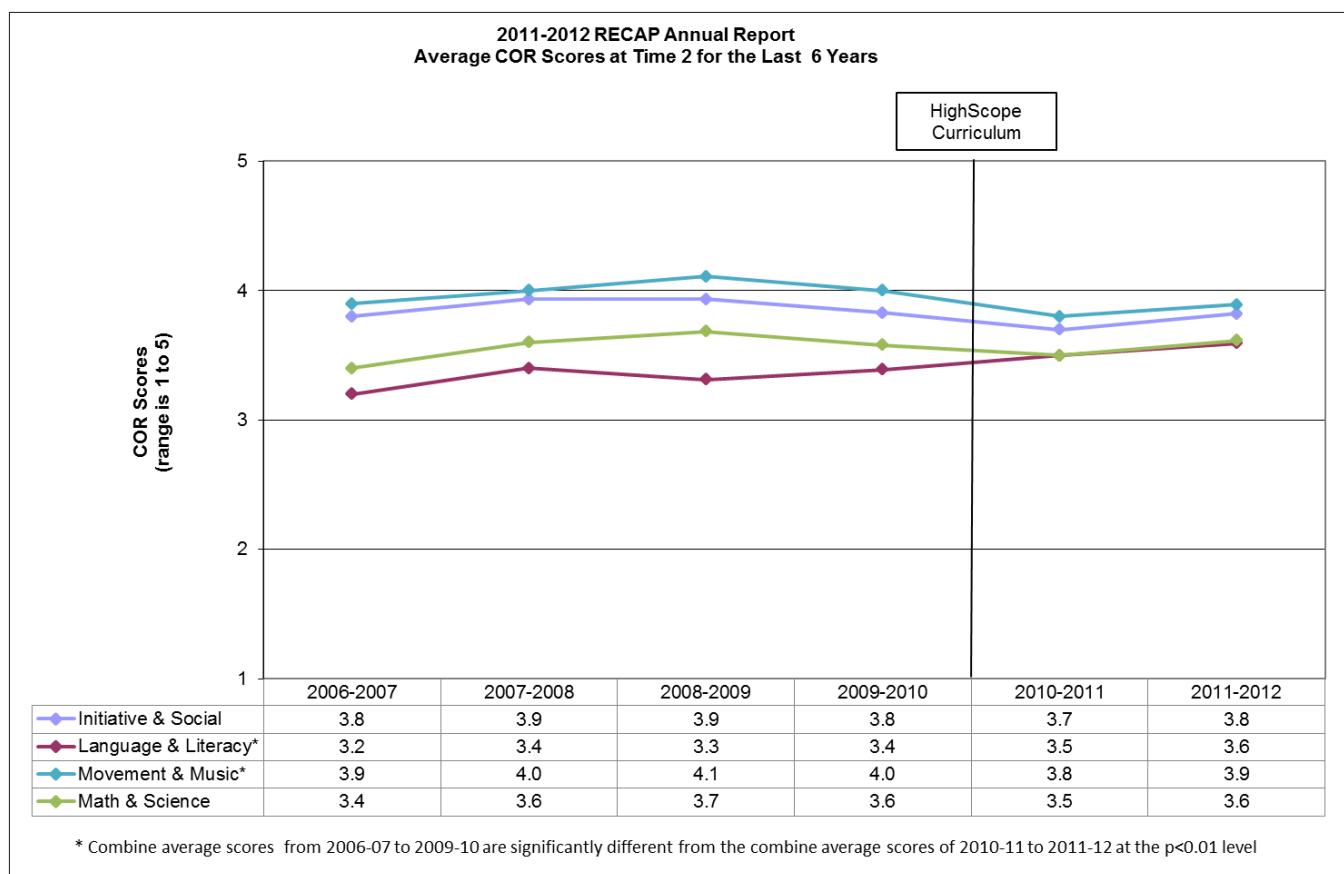


Table 9. COR Subscales before and after HighScope implementation

2011-2012 RECAP Annual Report Average COR Subscale Scores at Time 2							
Skill Area	Pre-HighScope			Post-HighScope			Effect Size
	N	Mean	St. Dev.	N	Mean	St. Dev.	
<i>Initiative & Social</i>	6840	3.82	0.88	3191	3.79	0.84	0.02
<i>Language & Literacy**</i>	6838	3.27	1.04	3188	3.53	0.92	-0.13
<i>Movement & Music**</i>	6843	3.97	0.89	3188	3.85	0.81	0.07
<i>Math & Science*</i>	6833	3.50	1.09	3174	3.54	1.03	-0.02
* Scores are statistically different (p<.05)							
** Scores are statistically different (p<.01)							

While there are some small effects shown on COR scores after the implementation of the HighScope curriculum, it is important that note that 2011-2012 is only the second year that HighScope was used in the pre-k classrooms. This coming year's results, Year 3, will be important to understanding the initial impact of the curriculum as most teachers will have two solid years of experience and three years of professional development regarding this curriculum.

Figure 8 below shows scores from the spring administration of the T-CRS from the spring of 2007 to the spring of 2012. As is evident, the exit scores for the T-CRS have remained relatively constant over the last six years. Table 10 provides a side-by-side comparison of the combined results of the scores in the spring for the T-CRS from the four years prior to the implementation of the HighScope curriculum and the results of the combination of scores in the spring for the two years following the implementation of the curriculum. The *t*-test results indicate that the subscale scores for **Behavior Control**, **Assertiveness**, and **Peer Social Skills** from after the curriculum was implemented are statistically and significantly different from those subscale scores of the combined four years prior to the curriculum's implementation. These three subscales all decreased. It is important to note that the effect sizes are small, the change scores from year to year (as noted above) are almost identical, and declines in these scores appear prior to the inauguration of the HighScope curriculum, as illustrated by Figure 8. *So far there is no compelling evidence that children's behavior has changed since HighScope was put into use in the classroom.*

Figure 8. Six Years of T-CRS Scores at Time 2

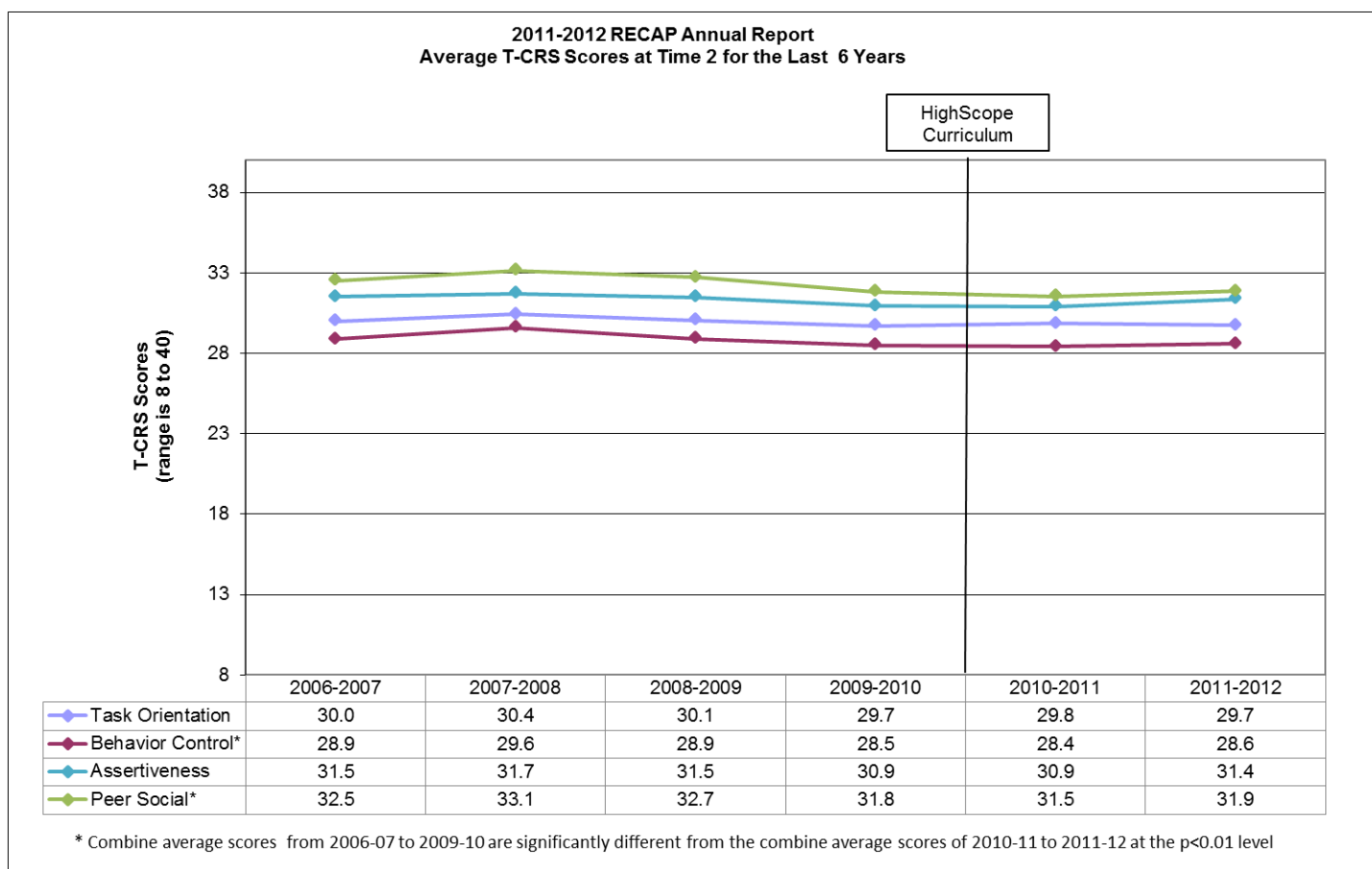


Table 10. T-CRS Subscales before and after HighScope implementation

2011-2012 RECAP Annual Report							
Average T-CRS Subscale Scores at Time 2							
Skill Area	Pre-HighScope			Post-HighScope			Effect Size
	N	Mean	St. Dev.	N	Mean	St. Dev.	
<i>Task Orientation</i>	6564	30.04	7.48	3299	29.92	6.74	0.01
<i>Behavior Control**</i>	6562	28.97	8.06	3299	28.50	7.42	0.03
<i>Assertiveness*</i>	6548	31.41	6.57	3299	31.13	5.84	0.02
<i>Peer Social**</i>	6561	32.54	6.66	3299	31.70	6.04	0.07
* Scores are statistically different (p<.05)							
** Scores are statistically different (p<.01)							

Both T-CRS and COR results will be monitored in the following years to determine the impact, if any, of the HighScope curriculum on student performance.

Performance and Student Attendance

This year, student attendance for the 2011-2012 school year was analyzed for classrooms who participated in RECAP. Most of the classrooms who provided data were part of community based organizations with the exception of a small sample of classrooms from RSCD (n=3). For purposes of these analyses, student attendance was divided into Time 1 (Fall), which included attendance for the months of September, October, November, and December, and Time 2 (Spring), which included the months of March, April, May, and June. During Time 1 a child could attend no more than 79 days, and during Time 2, the maximum number of days was 82. During the period of September to December, students attended, on average, approximately 60 days, missing on average 19 days. From March to June, the average attendance was 68 days, missing on average 14 days. *These results reveal that students in the Fall of 2011 attended 76% of the time and in the Spring of 2012, 88%, indicating a clear increase in attendance rates in the spring over the fall. These results also provide evidence showing that an average pre-k student missed 33 days, which is considered extremely poor and in need of significant attention.* The extent to which these results were related to weather conditions versus other factors has not been examined at this time.

Table 11 shows the relationship between the changes in students' COR scores from Time 1 to Time 2 and the number of hours of attendance that were reported for the students. It was predicted that those students with better attendance would perform better. Student attendance was positively correlated with each of the COR subscales, *suggesting that students who spent more time in the pre-k classroom had greater gains in COR scores than did students who spent less time in the classroom. Another way to look at these results is to say that from 6% to 12% of children's improved performance on the COR can be explained by how many times they came to class.*

Similarly, to understand better the relationship between attendance and students' behavioral performance, the change scores on the T-CRS were correlated to attendance. Table 11 shows that the scores on two of the T-CRS subscales, **Behavior Control** and **Peer Social**, were significantly and negatively related to student attendance. This indicates that students who spent more time in the classroom were more likely to show a loss in **Behavior Control** and **Peer Social Skills** than peers who spent less time in the classroom. In addition, attendance had no discernible influence on **Task-Orientation** or **Assertiveness**. *In sum, attendance did not influence behavioral performance on two of the dimensions, and for the other two, attendance was related to behavioral performance by 2% to 3%, and in a less healthy direction.*

Table 11. Correlations of COR and T-CRS Subscales with Student Attendance

2011-12 RECAP Annual Report			
Correlations of COR and T-CRS Subscales and Attendance			
	Skill Area	N	Pearson's Correlation
COR Subscales	<i>Initiative & Social</i>	857	0.25*
	<i>Language & Literacy</i>	846	0.34*
	<i>Movement & Music</i>	851	0.27*
	<i>Math & Science</i>	813	0.34*
T-CRS Subscales	<i>Task Orientation</i>	837	-0.04
	<i>Behavior Control</i>	837	-0.14*
	<i>Assertiveness</i>	837	-0.01
	<i>Peer Social</i>	837	-0.18*
* Correlations are statistically significant (p<.05)			

Parent Perspectives

Family Involvement Questionnaire

Family involvement and participation is a required and important component of the NYS Universal pre-kindergarten (UPK) program. Six years ago the RECAP administrative team reviewed the literature and determined the Family Involvement Questionnaire (FIQ) (Fantuzzo, McWayne, & Perry, 2004) was one of the best-researched instruments available to assess parent involvement from the parent's perspective. RECAP first piloted and administered the FIQ six years ago. For the past three years, the FIQ has been administered in both the fall and spring of the school year to measure any changes that may have occurred in parent involvement throughout the course of the year. The 2011-2012 year marked the beginning of the systematic use of the 21-item short form of the FIQ, which, based on preliminary analyses in previous years, demonstrates adequate and robust reliability and validity, when compared to the full 42-item FIQ. There are a number of advantages to reducing the number of items, most notably reducing the amount of time parents need to spend completing the questionnaire and, as an additional benefit, increasing the likelihood of the FIQ's completion.

The 21-item FIQ measures parents' involvement and support in their children's education. The measure is psychometrically sound, and has three empirically derived factors: ***School Involvement***, ***Parent-Teacher Communication***, and ***Home Involvement*** (Fantuzzo et al, 2004). These results have been independently validated by Children's Institute (Gramiak, Hightower, Brugger, Van Wagner, MacGowan, & Montes, 2007). These three areas of parent involvement are described as follows:

School Involvement: This includes activities and behaviors that parents engage in at schools/centers with their children. Examples are "I go on class trips with my child" and "I talk with other parents about school meetings and events."

Parent-Teacher Communication: This describes communication between parents and the school's personnel about the child's educational experience and progress, including talking with the teacher about multiple facets of the child's classroom experience. Some of those questions are "I talk to my child's teacher about his/her difficulties at school" and "I talk to my child's teacher about my child's accomplishments."

Home Involvement: This scale examines parent reported behaviors in the home that promote a learning environment for children, such as providing a place in the home for learning materials and creating learning experiences in the community. Items from this grouping include "I spend time with my child working on reading/writing skills" and "I take my child places in the community to learn special things (e.g. zoo, museum)."

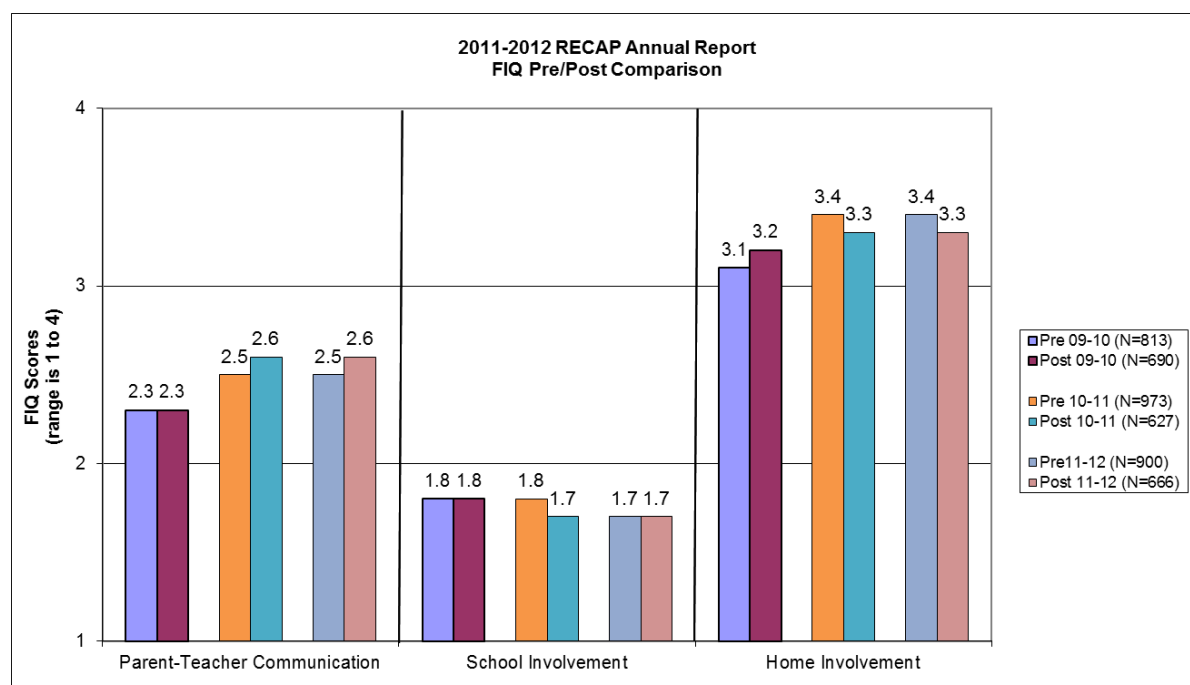
With this school year's data, we assessed whether differences emerged throughout the course of the family's involvement in their child's preschool year by reporting the pre and post comparison on the three scales, as well as the Cronbach's alpha reliabilities of the fall data collection. Results for individual programs are reported in the Statistical Supplement.

FIQ Pre/Post Results

Figure 9 shows that parents reported greatest involvement in the home environment, followed by moderate involvement with communications with teachers, and the least involvement in the classroom. This parallels the results from prior years.

Based on these findings, family involvement has changed very little over the past three school years. Any efforts that have been made to change this outcome have been unsuccessful. Because family involvement is important and because families typically do not get more involved in their children's education as the children grow older, it is critical that increasing family involvement be a significant effort in the pre-kindergarten years. Assuming there is a desire to improve family involvement and participation, pre-kindergarten program directors, teachers, and staff must lead the school district and implement specific successful strategies that improve parent teacher communications and family involvement in their programs and at their sites.

Figure 9. 2009-2012 FIQ Comparisons



* Results include all valid responses for both data collection points

FIQ Reliability

For any assessment process, it is important to know whether the assessment tool measures a construct consistently. If similar results are found each time the measure is used, it is considered to be reliable.

Cronbach's alpha is a test of a measure's internal consistency – how well the items in a scale measure the same construct consistently. It is sometimes called a “scale reliability coefficient.” Cronbach's alpha assesses the internal reliability of a measure's items (i.e., how well they relate to each other) and produces a numerical coefficient of reliability, which ranges from 0 to 1. Greater scores indicate better reliability. Scales with a reliability greater than .80 are considered adequate for individual assessments, and those whose reliability is greater than .70 are considered adequate for program evaluation.

In Table 12 below, demonstrates that all three areas maintain a high level of internal consistency.

Table 12. 2011-2012 FIQ Internal Reliability

2011-2012 RECAP Annual Report FIQ Internal Reliability for Time 1		
	N	Cronbach's Alpha
<i>Parent-Teacher Communication</i>	839	0.91
<i>School Involvement</i>	806	0.86
<i>Home Involvement</i>	861	0.82

FIQ Correlations with the COR and T-CRS

Table 13 displays the three FIQ scales correlated with the subscales of the COR and T-CRS at Time 1, at the beginning of the year. At Time 1, the *Home Involvement* area of the FIQ is statistically significantly correlated with the *Language & Literacy* and *Movement & Music* subscales on the COR, but the relationship is weak. *When children first come to school, teachers tend to perceive those who come from families with more parent reported involvement to have greater Language & Literacy skills, which are necessary for children to learn to read.*

There were no significant correlations between the FIQ and the T-CRS at Time 1. *How parents rate family involvement at the beginning of the year is unrelated to how teachers perceive children's social and emotional behaviors at school. In sum, these two instruments measure different constructs.*

Table 13. 2011-2012 FIQ Correlations Time 1

2011-2012 RECAP Annual Report			
FIQ Correlations with COR and T-CRS for Time 1			
	FIQ		
	<i>Parent-Teacher Communication</i>	<i>School Involvement</i>	<i>Home Involvement</i>
COR			
<i>Initiative & Social</i>	0.06	-0.03	0.10
<i>Language & Literacy</i>	0.07	0.00	0.15**
<i>Movement & Music</i>	0.02	-0.02	0.11*
<i>Math & Science</i>	-0.01	-0.03	0.08
T-CRS			
<i>Task Orientation</i>	-0.03	0.04	-0.01
<i>Behavior Control</i>	-0.04	0.04	0.01
<i>Assertiveness</i>	0.08	0.00	0.06
<i>Peer Social</i>	0.01	0.05	0.03
*Statistically significant at the p<.05 level			
** Statistically significant at the p<.01 level			

Table 14 presents the correlations between the change parents perceive on their family's involvement from the beginning to the end of the year with the change observed by teachers on academic (COR), motor(COR) and social and emotional functioning (T-CRS) during that same time period. The FIQ change scores did not show any significant correlations with the COR. *Based on these results, family involvement, as measured by the FIQ, is mostly unrelated to those areas assessed by the COR.* The only significant ($p < .05$) correlations are between the FIQ **Parent-Teacher Communication** scale and the T-CRS **Assertiveness** ($r = -.11$) and **Peer Social** ($r = -.11$) subscales. *Parents reported more communication with teachers and the school when their children were misbehaving, and less communication in the absence of behavior problems in the school. Although these correlations are very small, based on these results it seems likely that the most involved parents responded to the FIQ and those parents tend to develop a perception at the earliest grade, pre-kindergarten:*

Teachers and schools primarily contact parents when their children are not behaving well in the classroom.

Program directors and teachers may wish to consider strongly setting up systematic communications with parents when children are doing well and improving, not just when they have concerns.

Table 14. 2011-2012 FIQ Correlations Change Scores

2011-2012 RECAP Annual Report			
FIQ Correlations with the Change Scores on the COR and T-CRS			
	FIQ		
	<i>Parent-Teacher Communication</i>	<i>School Involvement</i>	<i>Home Involvement</i>
COR			
<i>Initiative & Social</i>	0.08	-0.04	-0.04
<i>Language & Literacy</i>	0.05	-0.07	0.00
<i>Movement & Music</i>	0.03	-0.04	-0.00
<i>Math & Science</i>	0.10	-0.06	0.01
T-CRS			
<i>Task Orientation</i>	-0.07	-0.03	-0.08
<i>Behavior Control</i>	-0.06	-0.03	-0.03
<i>Assertiveness</i>	-0.11*	-0.01	-0.03
<i>Peer Social</i>	-0.11*	0.00	-0.03
* Statistically significant at the $p < .05$ level			

Parent-Child Rating Scale

The Parent-Child Rating Scale (P-CRS) is a 39-item parent-completed measure designed to assess both social-emotional competences and concerns. Social-emotional competence includes being able to form and maintain positive peer relationships, being assertive and self-reliant, being able to tolerate frustration/setbacks, being able to self-regulate, and having a positive temperament. Social-emotional concerns include having negative peer relationships, and being anxious and insecure. The items of the P-CRS were developed over a 15 year period to specifically fit the perspective of a parent.

During the 2011-2012 school year, parents completed the P-CRS twice, once in the fall and again in the spring using a paper form. In addition to the paper format, the measure is also available for completion on-line through COMET, but this format is not used by RECAP parents at this time.

The P-CRS collects information on seven empirically derived subscales:

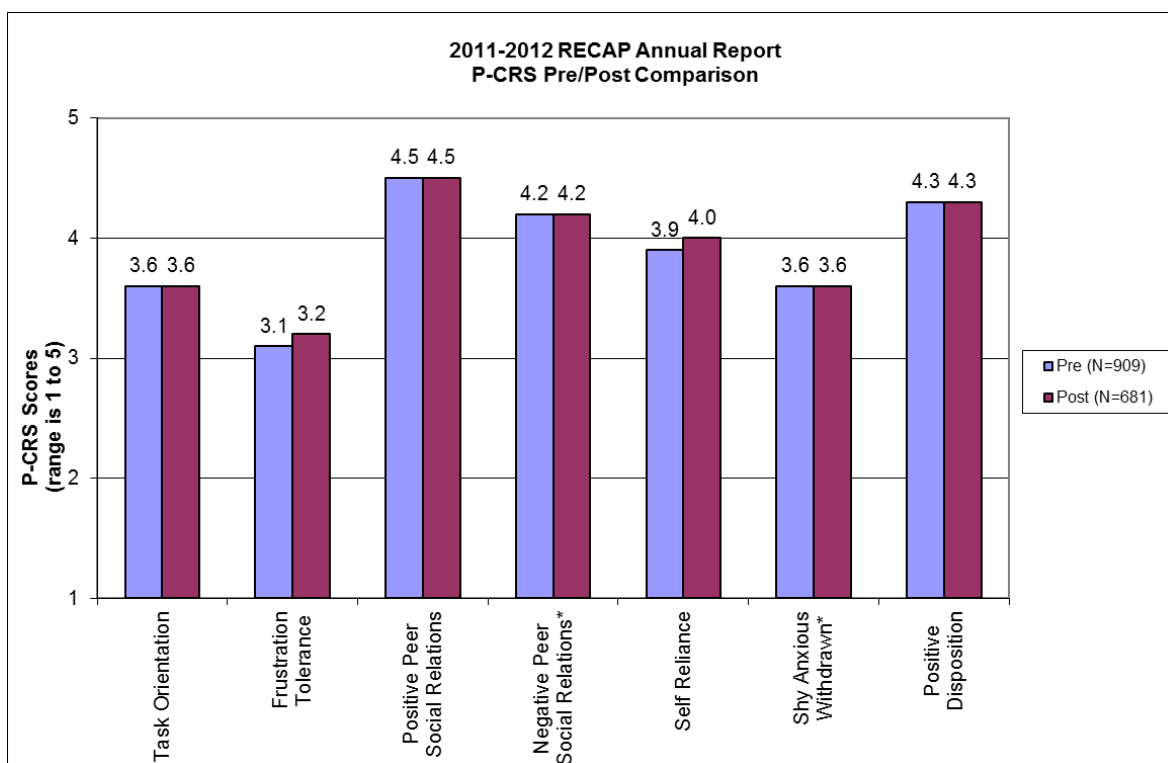
- ***Task Orientation***
- ***Frustration Tolerance***
- ***Positive Peer Social Relations***
- ***Negative Peer Social Relations***
- ***Self Reliance***
- ***Shy Anxious-Withdrawn***
- ***Positive Disposition***

Negative Peer Social Relations and ***Shy Anxious-Withdrawn*** reflect parental concerns about children's difficulty behaving or relating to other children, while ***Task Orientation***, ***Frustration Tolerance***, ***Positive Peer Social Relations***, ***Self Reliance***, and ***Positive Disposition*** are associated with parent-perceived competencies. The parent-completed P-CRS, in conjunction with teacher-completed COR and T-CRS, provide a more comprehensive multi-source composite of children's social and emotional development.

P-CRS Pre/Post and Reliability

Figure 10 shows that parents, on average, reported almost identical levels of functioning for their child at the beginning and at the end of the school year. Otherwise put, parents, as a group, did not perceive a change in their children's behaviors from the start to the end of the school year. This is not a surprising result for pre-kindergarten parents. Because they have a long-term perspective of their child, they are less likely to see subtle changes in behavior at home than are teachers who can see changes in a group of children relatively quickly within the classroom environment. However, parents' individual perceptions of their children are critically important for early childhood educators to learn from and understand what parents see as strengths and concerns for their children.

Figure 10. 2011-2012 P-CRS Pre/Post Comparison



* Rekeyed so that higher value indicates better functioning

**Results include all valid responses for both data collection points

As seen in Table 15 below, all seven P-CRS subscales show moderate levels of reliability. Internal consistency for the subscales range from $\alpha = .71$ to $\alpha = .87$ with a median of .79.

Table 15. 2011-2012 P-CRS Internal Reliability

2011-2012 RECAP Annual Report P-CRS Internal Reliability for Time 1		
	N	Cronbach's Alpha
<i>Task Orientation</i>	878	0.74
<i>Frustration Tolerance</i>	856	0.81
<i>Positive Peer Social Relations</i>	867	0.87
<i>Negative Peer Social Relations*</i>	885	0.72
<i>Self Reliance</i>	861	0.79
<i>Shy Anxious Withdrawn*</i>	824	0.75
<i>Positive Disposition</i>	871	0.71
* Rekeyed so that higher value indicates better functioning		

P-CRS Correlations with the COR and T-CRS

The teacher completed observation measures, the Child Observation Record (COR) and the Teacher-Child Rating Scale (T-CRS) subscales, were correlated with the P-CRS subscales. See Table 16 for results from Time 1, and Table 17 for correlations between change scores.

Parents' perceptions of their children at the beginning of the year on ***Task Orientation, Positive Peer Social Relations, Negative Peer Social Relations*** and ***Self Reliance*** as measured by the P-CRS are positively and significantly associated with scores on all four of the COR domains. *This indicates that there is a relationship between parents' perception of their children's behavior and teachers' perceptions of the children's academic performance at the beginning of the school year. Children who are perceived by their parents as having better behavior on the P-CRS in the fall perform better on the COR. At the same time, children whose parents report poorer behavior on the P-CRS tend to perform worse on the COR at the beginning of the school year.*

When it comes to change over the course of the school year, parents' perceptions do not appear to be the same as teachers' perspectives of how a child changes. Again, this could be attributed to parents' longitudinal perspective of their child which is less likely to see change in the child. It could also indicate that changes in children's behavior may be based on the environment in which they are observed. Teachers observe changes in children's behavior, academics and social-emotional skills in the classroom but those skills may not be evident in the home environment.

Though parents may not see the same changes in their children that teachers see over the course of a school year, parents' perceptions of their own children at the beginning of the year are critically important for early childhood educators. Discussions between parents and teachers that take place at the beginning of the year can provide invaluable insight into both the children's strengths and their weaknesses. By having these conversations, teachers would be able to gain an understanding of their students' strengths and weaknesses earlier in the school year, allowing them to provide more direct support to areas of concern but also showing them areas in which they can encourage continued growth.

Table 16. 2011-2012 P-CRS Correlations Time 1

2011-2012 RECAP Annual Report							
P-CRS Correlations with COR and T-CRS for Time 1							
	P-CRS						
	<i>Task Orientation</i>	<i>Frustration Tolerance</i>	<i>Positive Peer Social Relations</i>	<i>Negative Peer Social Relations⁺</i>	<i>Self Reliance</i>	<i>Shy Anxious Withdrawn⁺</i>	<i>Positive Disposition</i>
COR							
<i>Initiative & Social</i>	.22**	.08	.18**	.12*	.21**	.12*	.05
<i>Language & Literacy</i>	.23**	.11*	.18**	.12*	.20**	.12*	.04
<i>Movement & Music</i>	.24**	.08	.17**	.14**	.22**	.12*	.04
<i>Math & Science</i>	.21**	.05	.13*	.11*	.15**	.08	.00
T-CRS							
<i>Task Orientation</i>	.28**	.11*	.01	.10	.17**	.02	-.02
<i>Behavior Control</i>	.25**	.14*	.00	.17**	.10	-.03	.00
<i>Assertiveness</i>	.00	.03	.18**	.00	.10	.17**	-.05
<i>Peer Social</i>	.12*	.06	.11*	.13*	.11*	.04	.00
* Statistically significant at p<.05							
**Statistically significant at p<.01							
⁺ Scores have been rekeyed so that higher scores mean better levels of functioning							

Table 17. 2011-2012 P-CRS Correlations Change Scores

2011-2012 RECAP Annual Report							
P-CRS Correlations with Change Scores on the COR and T-CRS							
	P-CRS						
	<i>Task Orientation</i>	<i>Frustration Tolerance</i>	<i>Positive Peer Social Relations</i>	<i>Negative Peer Social Relations⁺</i>	<i>Self Reliance</i>	<i>Shy Anxious Withdrawn⁺</i>	<i>Positive Disposition</i>
COR							
<i>Initiative & Social</i>	-.01	.05	-.04	-.05	-.06	-.11*	-.01
<i>Language & Literacy</i>	-.05	-.02	-.05	-.03	-.05	-.11*	-.09
<i>Movement & Music</i>	-.02	-.04	-.10*	-.05	-.10	-.03	-.02
<i>Math & Science</i>	-.04	.01	-.06	-.09	.00	-.13*	-.07
T-CRS							
<i>Task Orientation</i>	.09	.11*	.02	.09	.06	-.02	.03
<i>Behavior Control</i>	.12*	.07	.07	.05	.11*	-.03	.04
<i>Assertiveness</i>	.08	.12*	.05	.01	.04	-.05	.06
<i>Peer Social</i>	-.01	.08	.11*	.10	.04	-.01	.09
* Statistically significant at p<.05							
⁺ Scores have been rekeyed so that higher scores mean better levels of functioning							

Conclusion and Future Directions

Conclusion

This Fifteenth Annual Report on the RECAP system finds that classroom quality continues to maintain high standards of excellence. Each year, additional teachers are earning the ECERS-R exempt status. The efficacy of this continuous improvement system and the important role that feedback reports serve in continuing to inform the implementation of quality standards in classrooms has been repeatedly demonstrated. High quality practices are being implemented in 148 classrooms serving approximately 2,700 students in Rochester.

Summary of the major findings for the 2011-2012 school year:

- ❖ Classroom quality continues to be a hallmark of the RECAP experience. The last ten years have shown an overall average rating on the ECERS-R of “extremely good” ($\bar{x} \approx 6.0$) for Rochester’s pre-kindergarten classrooms, one of the highest in the U.S.
- ❖ The RECAP system continues to serve its constituents – students, parents, teachers, administrators, and policymakers – with data to assist in performing annual assessments that in turn support decision making with use of trend data. RECAP allows for an in-depth understanding of the educational infrastructure and its working elements.
- ❖ The RECAP Assessment Team continues to facilitate both administrative and assessment processes that further strengthen the supports required to sustain quality in its system of classrooms.
- ❖ Rochester City School District and ABC Head Start implemented the HighScope curriculum. On the COR, growth has increased in *Literacy & Language* but has decreased in *Movement & Music* in comparison to previous years’ results. The other two subscales remain consistent.
- ❖ The three-year CLASS pilot ended its final year in 2012, and the findings showed that *Instructional Support* is still an area that needs to be improved upon. The feedback reports given to participating teachers and the analyses completed with multiple statistical methods will continue to help inform future initiatives.
- ❖ The CLASS assesses different domains from the ECERS-R and holds significant promise in advancing state of the art practices in pre-kindergarten classrooms. Moreover, the CLASS also has potential beyond pre-k. Analyses done on the CLASS and the COR showed many significant correlations and suggest that children who are in more organized classrooms, will have greater gains in their academic and social-emotional functioning.
- ❖ Parents’ perceptions of their own involvement and their child’s development remain relatively unchanged from the beginning to the end of the school year.

Review of Past Recommendations

Last year's report suggested that the use of web-based reporting to administrators and teachers be continued. Constant efforts are being made to improve the process of gathering and managing children's data based on the feedback and suggestions made by teachers and administrators using web-based software.

The completion of the CLASS pilot has provided insight into the areas of program and instructional quality that can be improved upon. Continued commitment to professional development and training have seen an impact on classroom quality within RECAP programs. The recommendation to analyze the relationship of the CLASS to other RECAP measures has provided teachers and administrators with a deeper understanding of how their policies and programs affect children's learning and growth.

Recommendations and Future Directions

In an effort to continually improve children's educational experience, RECAP continues to undertake new initiatives and to reevaluate and refine its processes. The use of instant access to web-based reports to administrators and teacher will help guide the vision of those working with pre-k children. Access to this information in such a timely and comprehensive manner allows for shifts of policy and program implementation and administration to respond to the needs of children as they present themselves.

The CLASS pilot has demonstrated that the CLASS and the ECERS-R assess different areas of the classroom environment. The use of both instruments together offers a more complete picture of the classroom environment than either one does on its own. As such, it is recommended that the CLASS continue to be used in RECAP as it provides new areas for professional development and growth.

Evaluation of the effects of the implementation of the HighScope curriculum in its third year will give a better understanding of its effects on children's academic and social-emotional growth.

Presentations and Publications

Hightower, A.D. & MacGowan, A. (2011). *Rochester Early Childhood Assessment Partnership 2010-11 Fourteenth Annual Report: Promoting informed decisions for early childhood*. Presentations to RECAP Community Partners and the RECAP Community Advisory Council.

Brugger, L. (2011). *Rochester Early Childhood Assessment Partnership 2010-11 Fourteenth Annual Report: Promoting informed decisions for early childhood*. Presentation to Early Childhood Development Initiative.

Brugger, L. & Hightower, A.D. (2011). Geneva City School District Universal Prekindergarten Program and Head Start Program. Presentation of RECAP trainings, assessment system, and COMET informational session.

Hightower, A.D. & Brugger, L. (2011). Central New York Community Foundation. Presentation of RECAP trainings, assessment system, and COMET informational session.

Brugger, L. (2011). Central New York Community Foundation Grantee Monthly Meeting. Presentation of RECAP trainings, assessment, and overview of RECAP system for Enable Exploring Your World Preschool Program.

Brugger, L. (2012). Jowonio School. Presentation of RECAP trainings, assessment system, and COMET informational session.

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