

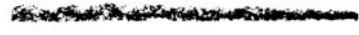


**ROCHESTER EARLY CHILDHOOD ASSESSMENT PARTNERSHIP  
2006-07 TENTH ANNUAL REPORT**

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OCTOBER, 2007

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STRENGTHENING SOCIAL AND  
EMOTIONAL HEALTH



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All authors are affiliated with Children's Institute, except for Andrew MacGowan, III, who is affiliated with the Rochester City School District

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RECAP 2006-07 Annual Report

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## **Executive Summary**

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RECAP 2006-07 Annual Report

**Executive Summary**  
**Rochester Early Childhood Assessment Partnership**  
**Annual Report 2006-07**

**1. Overview of RECAP Today**

The Rochester Early Childhood Assessment Partnership (RECAP) was started in Rochester, New York in 1992, by local foundations, business leaders, public schools, higher education, local governments and others. RECAP's purpose has been to address the need for understanding and improving the effectiveness of early education and care programs. Today, with public and private support of early care and education providers, local government, foundations and schools, RECAP has become responsible for the assessment of approximately two-thirds of Rochester's 4-year-olds, including its New York State Universal Prekindergarten program, and about one-quarter of Rochester's 3-year-olds.

RECAP provides an integrated and systemic process for ensuring that early childhood providers, programs, and other stakeholders have the information they need for making informed decisions that improve practices and child outcomes. RECAP provides useful data analyses on the status of Rochester's early childhood programs including: 1) parent satisfaction, involvement and interest in child development, programs, agencies, and support services; 2) classroom quality via independent classroom observations of adult and child interactions and environment; and 3) child-specific outcomes in motor development, speech and language development, school ("academic") skills, and socio-emotional skills.

The following schools and agencies participated in RECAP in 2006-07:

- Action for a Better Community, Inc. Head Start
- Annie's Ark, Inc.
- Charles Settlement House
- Diocese of Rochester Catholic Schools in the City of Rochester
- Early Childhood Education Quality Council Centers
- Family Resource Centers of Crestwood Children's Centers
- Monroe Community College Childcare Center
- Rochester Childfirst Network Family Childcare Satellites of Greater Rochester
- Rochester City School District Florence S. Brown Preschool Program
- Rochester City School District Early Childhood and Elementary Schools
- Rochester City School District Rochester Preschool-Parent Program (RPPP)
- YMCA of Greater Rochester

Number of young children served by RECAP in 2006-07:

2,694 pre-k students and 162 classrooms participated this year, compared to 2,531 students and 156 classrooms last year. There were 690 three-year-olds this year, compared to 595 last year.



## **2. Measures**

### **Quality of Classroom and Program Environment**

Independent, well-trained observers rate the quality of classroom and program environment using the Early Childhood Environment Rating Scale-Revised (ECERS-R) and Family Day Care Rating Scale (FDCRS). Seven areas of classroom and program quality are measured. The item scale ranges from 1 to 7. A score of 1 is considered “inadequate;” 5 is an accepted standard, considered a benchmark; 7 is the highest attainable score.

### **Student Performance**

The Child Observation Record (COR), developed by High/Scope, assesses students 2.5 to 6.0 years of age. A child’s acquisition of initiative-social, movement-music, language-literacy, and math-science skills are measured on a five-point developmentally sequenced scale with each point representing a level of growth along a developmental continuum. Student performance is measured by the change of growth on the COR between the fall and the following spring. RECAP has developed local norms for both prekindergarten and kindergarten on large samples (>2000).

### **Socio-emotional adjustment**

The Teacher-Child Rating Scale (T-CRS) is a reliable, predictive, nationally-normed instrument that assesses children’s socio-emotional adjustment in four areas: 1) Task Orientation, 2) Behavior Control, 3) Assertiveness, and 4) Peer Social Skills. Students who score below the 15<sup>th</sup> percentile (approximately one standard deviation) on any T-CRS subscale are considered to be at risk in that particular area.

### **Reliability of the Measures**

RECAP takes great care and devotes resources to ensure reliability in the measures we report annually. RECAP routinely publishes its reliability statistics. Moreover, the processes utilized by RECAP to ensure high reliability are rigorous.

The primary measures of the evaluation (ECERS-R, FDCRS, T-CRS, and COR) have alpha-reliabilities ranging from 0.86 to 0.94. To ensure the inter-rater reliability of the ECERS-R observation, 23 classrooms (14% of all observations) were observed by two observers, so that the level of agreement between different observers could be calculated. The inter-rater reliability was  $r = 0.95$  ( $n=23$  dual observations). When using the formula  $(a/a+d)$ ;  $a$ =agreement and  $d$ =disagreement) the median inter-rater reliability was .88 for exact matches and .93 for differences of one point.

### **3. Results on Classroom Quality**

Classrooms assessed by RECAP were of high to very high quality; the mean ECERS-R score for RECAP classrooms was 5.9 and the median score was 6.2. The average ECERS-R quality of classrooms across the United States is 4.3, so RECAP was about 1.7 standard deviations above the national average, or at the 96th percentile.

Of the 162 classrooms:

- Only 16% of the classrooms were rated below a 5.0.
- 55% (more than half) of the classrooms had scores of 6.0 or above.
- 84% of the classrooms had at least good quality (score of 5 or more).
- In other words, 84% – or more than 8 out of every 10 classrooms – are at or above accepted standards for high performing classrooms.

(Note: There were a total of 162 classrooms in RECAP this year. While we do assess every teacher's classroom in RECAP, we do not assess more than one classroom per teacher. Because 35 teachers had 2 classroom sessions, a total of 127 classroom sessions were assessed this year.

Teaching experience: For the second year, we conducted an analysis this year to determine the relationship between ECERS-R scores and years of teacher experience in RECAP. We found that teachers with 6 or more years of experience have higher total ECERS-R scores by 0.7 compared to the teachers who were relatively new to RECAP, with either zero or one year of RECAP experience. Last year the difference between these groups was 0.5. This year, there were 58 relatively new teachers in RECAP out of a possible 127. Last year there were 48 teachers with either zero or one year of RECAP experience out of a total of 128. Based on previous results, it will likely take several years to raise the ECERS-R scores for these new teachers/classrooms.

### **4. Results on student performance initiative-social, movement-music, language-literacy, and math-science skills**

More than 80% of the students had COR change scores above developmental expectations. Only a small percentage (about 4%) of students shows "negative growth." Additionally, those with negative growth in motor skills were considerably less than in the previous 3 years.

This year, based on the growth in COR scores, there were no detectable differences in actual versus normal expectations when comparing among the race/ethnicity of pupils in Rochester. This finding, however, has not always been consistent in previous years. Last year, white students showed significantly less growth above expectations in motor and initiative & social skills and Hispanic students showed the most growth in the initiative & social skills.



There was a detectable difference in growth among boys and girls again this year. Girls were found to have had more growth than boys in the initiative-social, movement-music, and language-literacy, but not the math-science skills. Just as for race/ethnicity, this finding has not always been consistent in previous years. Last year we only saw differences in COR growth by gender in the academic skills.

In 2003, the authors of COR introduced a new 32-item version of the COR (COR32). After RECAP collected COR32 data for the past two years, data analyses were completed on this COR32 data and reported on in June 2006. An additional RECAP highlight for 2006-07 was that as a result of this earlier work, beginning in the fall of 2006-07, RECAP started using a reduced set of the 23 items from the COR32 version.

Additionally, the results from testing this new COR32 yielded the following four-dimensional construct structure for the COR23 for 4-year-olds, which we are now using:

- Initiative & Social Skills
- Movement & Music
- Math & Science
- Language & Literacy

To summarize this change: for RECAP, beginning in 2006-07, the previous single “Academic” COR subscale is now broken out into discrete domains for “Math & Science” and “Language & Literacy.”

## **5. Results in Socio-Emotional Risk Factors**

About 12% of the students presented multiple socio-emotional risk factors at entrance into preschool in the fall of 2006 (e.g., students below the 15<sup>th</sup> percentile on the T-CRS), compared with 11% last year. This percentage has been as high as 16% in some years.

Students who entered preschool with multiple socio-emotional risk factors were rated by their pre-k teachers as lower in initiative & social, movement & music, language & literacy, and math & science skills than their peers who were not at risk. This finding is consistent with previous years.

Of the students who initially presented no socio-emotional risk factors, 7% presented one and 4% showed multiple risk factors (up from 2% last year) at the end of the academic year.

This year, there were no gender differences found in the number of socio-emotional risk factors by risk factor type at entrance into prekindergarten. This finding, however, has not always been consistent. Last year, 4.4% of boys had a behavior control risk factor compared to only 1% of the girls (significantly different). This year, 3.9% of the boys had a behavior control risk factor compared to 2.7% for girls (not significantly different). For the first time in the last five years, there were race/ethnicity differences seen in the number of socio-

emotional risk factors. About 30% of the white students had one or more risk factors compared to 23% for Black students and 21% for Hispanic students.

The initial classification of students with a single risk factor changed. By the end of the academic year, 61% of the students classified with a single risk factor improved and had no detectable socio-emotional risk factors; 24% remained the same and 15% presented multiple socio-emotional risk factors.

As in previous years, roughly half of the students who started initially with multiple risk factors improved and did not have multiple risk factors at the end of the year. More specifically, 56% of students with multiple socio-emotional risk factors remained in that category at the end of the academic year. But, conversely, 44% did move out of this category, with 17% improving to one risk, and 27% improving dramatically to no risks by the spring.

## **6. Results in Parental Perspectives**

Parent Satisfaction Survey – Overall, parents remain very satisfied with their children’s prekindergarten programs. 94% rated the programs above a “B” (good), and 61% of parents rated their child’s program with an “A” grade. Over the last 6 years, parent’s ratings with B+ or higher has consistently been between 93% and 95%. There were no real major differences between this year and last year in rates of overall parental satisfaction with their program.

Family Involvement Questionnaire (FIQ) – The Family Involvement Questionnaire is a new questionnaire that was distributed to parents this year. The FIQ was developed to look at the many ways parents support their children’s education. Children do better when their parents are more involved in their life at school. The FIQ was developed by Perry, Fantuzzo, and Munis, University of Pennsylvania, Graduate School of Education, 2002.

Based on an analysis on the 2006-07 RECAP survey results, we found three distinct areas of parent involvement:

1. Parent Involvement in the School. This area is defined by activities and behaviors parents engage in at schools/centers with their children.
2. Parent Involvement at Home. This area includes behaviors describing the active promotion of a learning environment at home for children.
3. Parent-Teacher Communication. This area describes communication between parents and school/center personnel about a child’s educational experience and progress.

The first year RECAP results from the Family Involvement Questionnaire showed that the prevalent parent involvement type for Rochester pre-k parents was “Parent Involvement at Home,” followed by “Parent-Teacher Communication,” and then “Parent Involvement in the School” with the lowest level of participation. The FIQ results, both by program, and for all

programs combined, clearly shows that parents report that they are most heavily involved with their children at home. While some programs have higher school involvement than others, home involvement is the most prevalent factor across all programs.

## **7. Training and Consultation Summary**

- 34 program staff members participated in orientation activities.
- 21 prekindergarten teachers were trained in the COR.
- 23 program staff members were trained in the ECERS-R.
- 4 new ECERS-R master observers were trained.
- 23 ECERS-R master observers participated in refresher training.
- 12 program staff members attended reports interpretation workshops or individual sessions.
- 33 program staff members and partners attended 2005-06 Annual Report Findings presentations.

## **8. Family Support**

For the past several years, in addition to student classroom attendance, parent attendance in a variety of program activities was collected for RECAP programs. This year, for the third consecutive year, we have reported on both the different types of activities and the average frequency of how often parents become involved in their child's program. One interesting observation from this data is that for RECAP programs overall there was an average of 13 total contacts recorded between parents and their program during the school year.

## **9. Family Childcare**

RECAP included family childcare providers for a third year in 2006-07. Assessment of family childcare is a key outcome for RECAP motivated by community investment and interests. Currently, 14 family childcare providers are participating in RECAP. The mean FDCRS score this year was 5.6 (n=14) which can be categorized as "Good" quality. The mean FDCRS improved from 5.4 last year (n=22).

## **10. Pre-k Children with Disabilities**

An analysis on pre-k students with disabilities was again completed in partnership with the Rochester City School District's (RCS D) Department of Research, Evaluation and Testing, and the Department of Early Childhood Education. We find that about two-thirds of pre-k students with disabilities are boys. Pre-k students classified with a disability perform consistently at lower levels, as measured by the COR and T-CRS, than the general education population. However, they often make gains commensurate with those of the general education students.

## **11. Formal RECAP Incorporation of the Children’s Health Information (CHI)**

The parent-completed questionnaire, CHI, was developed and first implemented in 1999 by Children’s Institute. It was designed to provide preschool personnel with a conduit for obtaining systematic information from parents regarding their prekindergarten children, particularly in areas of overall health. The CHI serves as the pre-k equivalent to the more comprehensive Parent Appraisal of Children’s Experiences (PACE), conducted at K-2 since 1998. The CHI covers three main areas: demographics, general health information, and overall performance. CHI questionnaires were completed for 799 children in 2006-07 (30% of all RECAP students). The CHI was most often completed by the child’s mother (90%).

The following are highlights: 23% of entering pre-k pupils have never visited a dentist (22% last year and 31% two years ago); asthma rates are very high, with 22% of the pupils’ physicians reporting asthma; 12% of entering pre-k pupils having been hospitalized for asthma in the past year; and approximately 26% of the parents are concerned enough about other developmental issues to suggest that their children are in need of additional services.

## **12. Follow-up Study**

**Follow-up of RECAP students** – Again this year, RECAP compared the 2006-07 kindergarten performance of students who participated in RECAP 2005-06 pre-k programs with students who did not attend RECAP programs. The RCSD 2006-07 kindergarten COR scores were used. Once again we found that the 2005-06 RECAP students had slightly higher 2006-07 fall and spring kindergarten COR scores than non-RECAP students. The actual effect size was small, but significant. This finding has now repeated for the 4 consecutive years that these analyses have been performed. Of special note this year, involvement in RECAP pre-k programs still appears to work equally well for all students.

## **13. Gender Gap Data Analysis**

For some time now we have been observing a small but significant difference in the RECAP outcomes between boys and girls. Last year we documented these differences due to gender in the RECAP 2005-06 Annual Report. This year, we ran a new analysis for the purpose of determining whether certain teachers or groups of teachers could be identified as having more of a gender gap than other teachers. If we could identify a gender gap by teacher effect, we could then test whether specific teacher attributes could predict a larger or smaller classroom gender gap.

While we found that there were clearly gender gap differences between teachers, we could not find any significantly related teacher or classroom variables that could be used as predictors of these differences.

#### **14. New York State Efforts**

RECAP adaptation by the Chemung County School Readiness Project. This year the RECAP model was adapted for Chemung County, New York with trainings and classroom observations using the Early Childhood Environment Rating Scale – Revised (ECERS-R).

## Acknowledgements

This report would not be possible without the important contributions of the many partners. Such partners include programs, foundations, and other agencies, each consisting of many individuals who, year after year, give their time, hard work, ideas, and support to the Rochester Early Childhood Assessment Partnership (RECAP).

Financial support was provided by Rochester Area Community Foundation, Monroe County Department of Human Services, Rochester City School District, Rochester's Child Fund of the Rochester Area Community Foundation, the New York State Department of Education, and United Way of Greater Rochester.

Other contributing partners include Action for a Better Community Head Start, Inc., Annie's Ark, Inc., Catholic Diocese of Rochester, Charles Settlement House, Children's Institute, Early Childhood Education Quality Council Centers, Family Resource Centers of Crestwood Children's Center, Florence S. Brown Pre-k Center, Monroe Community College Childcare Center, Rochester Childfirst Network Family Childcare Satellites of Greater Rochester, Rochester Preschool-Parent Program, Rochester City School District programs and Department of Research, Evaluation, and Testing, and Universal Prekindergarten Centers.

We thank 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. Not only do these individuals contribute information, but they also share their cooperation and insight with our team. This is of great value in our ongoing process of system revision and improvement.

We especially wish to thank the thousands of parents who gave time from their busy schedules to share their thoughts and perceptions on a variety of topics and to complete important "paperwork."

We thank the RECAP Policy Group for helping us to keep the needs of all our partners foremost in our operations. Our Policy Group contributes valuable feedback and insights regarding the current goals and activities of our community's early childhood system.

We thank the entire RECAP team, particularly Amy Baker, Julia Guttman, Pat Dangler, and Diana Webb, as well as the creative staff of Children's Institute, for their contributions to RECAP and this report.

We are excited about the future of RECAP and its impact on young children's experiences. With a shared vision, we continue to promote informed decision making to enrich and improve early childhood programs and school performance.



## **I. Program Quality**

### **ECERS-R – Quality of the Classroom Environment**

Classroom quality is key to the provision of early education services. Independent, well-trained observers rated the quality of classroom environment using the Early Childhood Environment Rating Scale – Revised (ECERS-R). The ECERS-R was developed at the University of North Carolina in the 1970s, and revised in 1998 (Harms, Clifford & Cryer, 1998). It is the most widely used objective observational tool of early education classroom quality and environment. The ECERS-R measures seven areas of classroom quality:

- Space and Furnishings
- Personal Care Routines
- Language and Reasoning
- Activities
- Interaction
- Program Structure
- Parents and Staff

Each area contains from 5 to 10 items that represent various elements of that area. The item scale ranges from 1 to 7. A score of 1 is considered “inadequate,” a score of 3 as meeting “minimal” standards, a 5 is equivalent to meeting “good” quality standards, and a 7 indicates “excellent” quality. Classrooms meeting National Association for the Education of Young Children (NAEYC) standards often score near 5.

After an observer is trained and meets inter-rater reliability of .85 with a master trainer, he or she is assigned to four to six classrooms. During a typical observation, an observer spends 3 to 5 hours observing the classroom, focusing on 43 distinct items that make up the ECERS-R. After the classroom observation, the observer typically spends an additional 30 to 60 minutes interviewing the teacher to answer any questions about classroom activities or features that could not be discerned during the observation phase.

#### **How are master observers trained?**

In the first year of training, observers must participate in a fifteen-hour training program. In every subsequent year, an additional four to five hours of training are required. Refinement of observation skills, inter-rater reliability, logistics of the observation process, observation guidelines and protocol are carefully reviewed with master observers every year.

Master Observers are trained to attain and maintain a minimum level of inter-rater reliability ( $a/a+d > .80$ ). Master Observers are recruited from the Rochester area and selected on the basis of their years of experience in early childhood education (>10 years), skills in program observation, and their personal interest.

## What is the reliability of the ECERS-R?

As part of an ongoing effort to maintain the reliability of the ECERS-R, 23 classrooms were observed by two observers so that the level of agreement between different observers could be assessed.

The internal reliability (alpha) of the ECERS-R was 0.94. The inter-rater reliability was  $r = 0.95$  ( $n=23$  dual observations). Using (a/a+d; a=agreement and d=disagreement) the median inter-rater reliability was 0.88 for exact matches and 0.93 for differences of one point. These findings show that the administration of the ECERS-R by RECAP conforms to high standards because the developers of the ECERS-R reported similar internal consistency (0.92) and inter-rater reliability (0.92). Table I-1 below shows the inter-rater reliability of ECERS-R total score and subscales.

<b>Scale</b>	<b>Inter-Rater Reliability (r)*</b>
Space	0.86
Routines	0.94
Language	0.87
Activities	0.96
Interaction	0.97
Program Structure	0.81
Parent and Staff Development	0.90
Total ECERS-R Score	0.95
Sample N	23
Note: * Signifies that all r values shown were Significant at $p < .001$ .	

A complete 6 year history of reliability statistics for RECAP measures plus a 6 year history of ECERS-R inter-rater reliability can be found in Appendix XII of the **RECAP 2006-07 Annual Report Statistical Supplement**. The technical report ID is T07-002 and can be downloaded from the Children's Institute web site ([www.childrensinstitute.net](http://www.childrensinstitute.net)).



### **Where is the ECERS-R being used?**

The ECERS-R is used in many studies investigating the quality and outcomes of prekindergarten education, both in the United States and internationally. The ECERS-R was adopted to measure the quality of prekindergarten classrooms funded by universal prekindergarten in the State of Georgia. It was also used in the cost, quality, and outcome studies that assessed quality in 120 classrooms in 3 states, in a study involving 150 classrooms in Florida, and in a study that evaluated the quality of 32 Head Start classrooms. Studies in Germany, France, Portugal, and Sweden have used the ECERS-R. In short, the ECERS-R is one of the premiere measures used to evaluate quality of prekindergarten environments both in the U.S. and around the world.

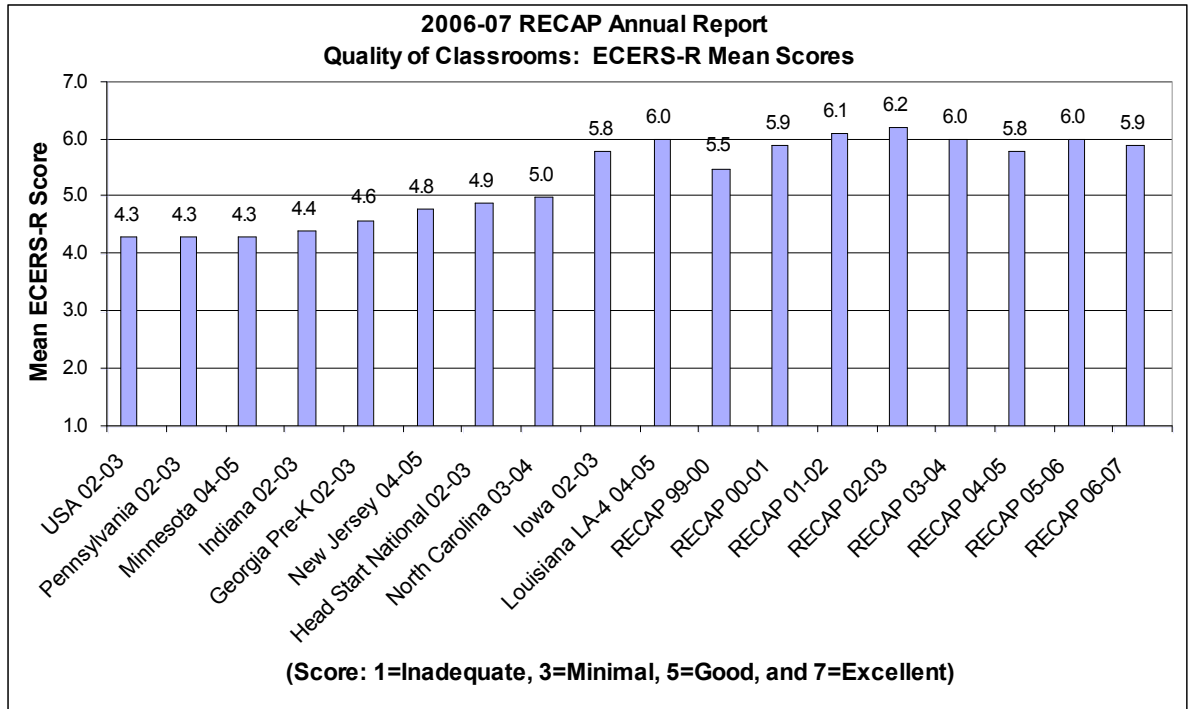
### **How does Rochester's formal Early Childhood Education (ECE) compare with ECE systems across the US?**

Using the ECERS-R allows comparison of the quality of the prekindergarten programs in Rochester with pre-k programs in other states and nations. Before any comparison is made, however, it is important to be certain that classrooms and student populations are similar.

In most of the studies using the ECERS-R, a sample was taken that included urban, suburban, and rural prekindergarten and childcare centers. In these studies, there was no attempt to select only programs or centers serving a high need or low-income population. RECAP differs in that we measure the quality of centers and schools serving an urban population in a city recognized for its high level of per capita child poverty – currently eleventh in the U.S. in per capita child poverty for urban areas (Children's Defense Fund, June 2002).

Figure I-1 below shows the recent mean ECERS-R scores for RECAP and other studies.

**Figure I-1 Quality of Rochester formal ECE system.**



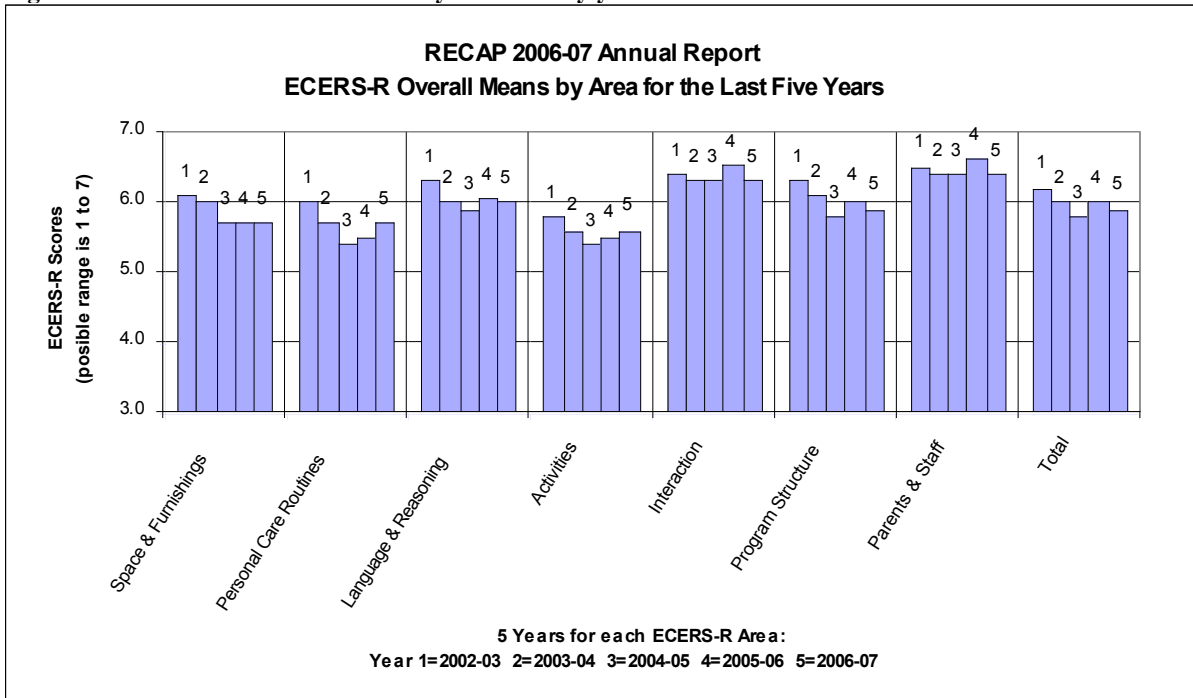
As in past years, RECAP programs have maintained a high quality level. The reported standard deviation for the United States sample was 1.0, which would place RECAP classrooms 1.7 standard deviations above the national average. Rochester is fortunate to have an exceptionally high quality early childhood system for four-year-olds. Policymakers and others interested in the overall welfare of the City of Rochester should regard Rochester’s early childhood programs as a key community asset in an otherwise highly impoverished city. Parents also should be informed that Rochester possesses an extraordinarily high quality formal prekindergarten system so that they can make informed decisions.

**Is the Quality Level of Rochester’s Formal ECE Changing?**

This year the mean ECERS-R score for RECAP classrooms was 5.9 and the median score was 6.2. As shown in Figure I-1 above, over the past 8 years, classroom quality level has been maintained at a high level. Please note that because seven is the maximum score in the ECERS-R, representing the perfect score in forty-three different items; the range of 5.8 to 6.2 scores over the last 7 years is approaching the maximum possible score of the scale, somewhat limiting our ability to measure improvement.



Figure I-2 ECERS-R Overall means by area and by year.



ECERS-R Overall Means by Area for the Last Five Years									
		Area							
School Year	Year	Space & Furnishings	Personal Care Routines	Language & Reasoning	Activities	Interaction	Program Structure	Parents & Staff	Total
2002-03 (n=128)	1	6.1	6.0	6.3	5.8	6.4	6.3	6.5	6.2
2003-04 (n=137)	2	6.0	5.7	6.0	5.6	6.3	6.1	6.4	6.0
2004-05 (n=129)	3	5.7	5.4	5.9	5.4	6.3	5.8	6.4	5.8
2005-06 (n=128)	4	5.7	5.5	6.1	5.5	6.5	6.0	6.6	6.0
2006-07 (n=127)	5	5.7	5.7	6.0	5.6	6.3	5.9	6.4	5.9

It can be seen in Figure I-2 above that ECERS-R scores for 4 areas have been fairly stable over a five year period.

Figure I-2 shows the mean ECERS-R scores based on a sample of 127 observations in 2006-07. There were a total of 162 classrooms in RECAP this year. While we do assess every teacher’s classroom in RECAP, we do not assess a teacher’s classroom more than once. Because 35 teachers had 2 classroom sessions, a total of 127 classroom sessions were assessed this year.

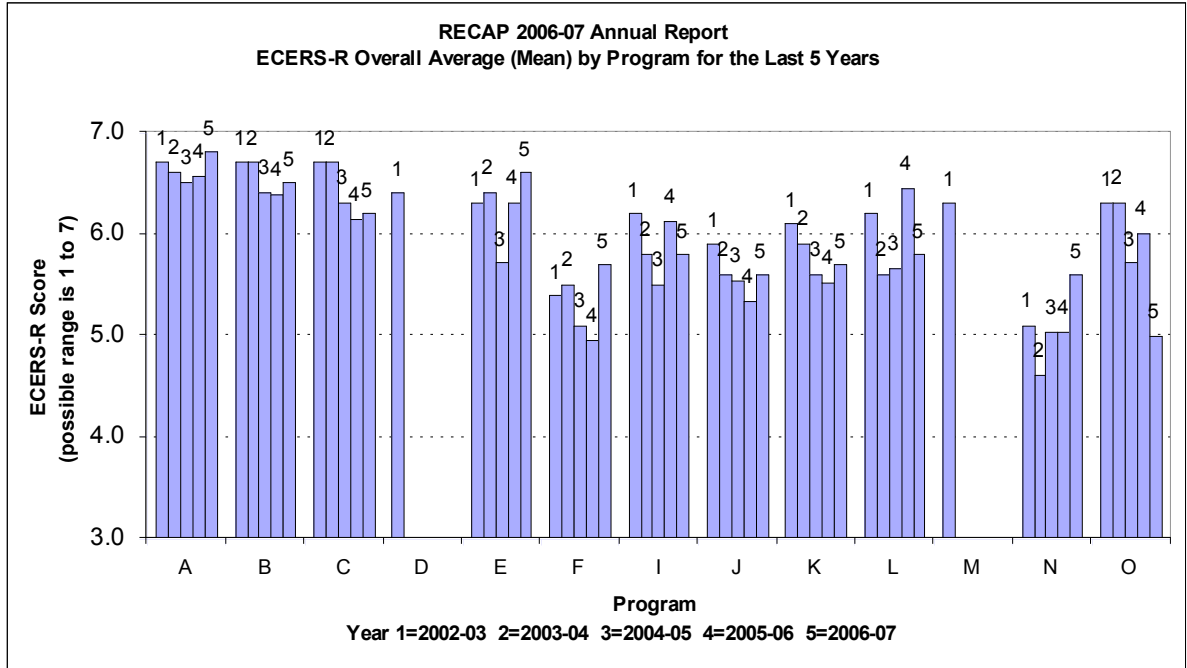
**Are individual programs maintaining high quality?**

Figure I-3 below shows that programs are generally maintaining a very high level of quality. Three programs that had a mean score of more than 6.0 last year dropped below that level of quality this year (programs I, L, and O). Eight programs scored higher this year compared to last year.



Please note that programs letter D and M in Figure I-3 are no longer independent programs. The classrooms for these programs were assimilated into other existing programs 2 years ago.

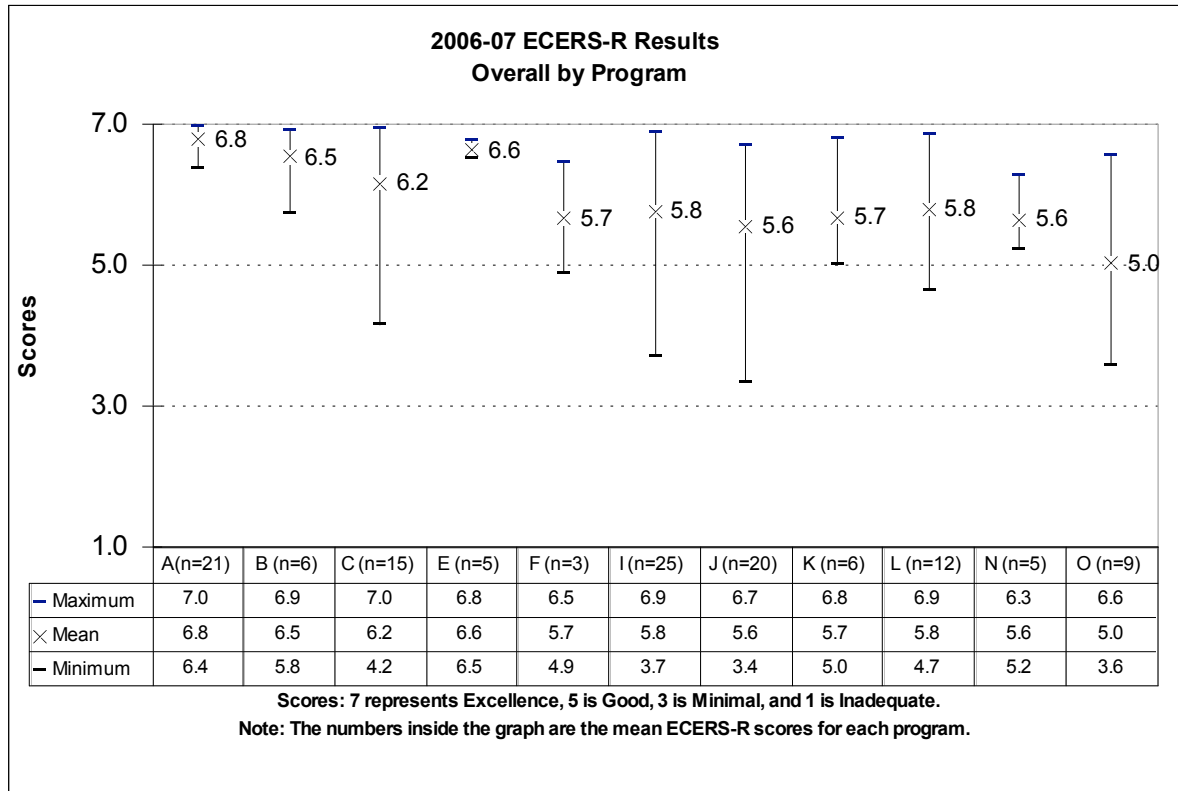
**Figure I-3 ECERS-R overall average (mean) by program and by year.**



ECERS-R Overall Average (Mean) by Program for the Last 5 Years																
				Program												
School Year	Mean	n	Year	A	B	C	D	E	F	I	J	K	L	M	N	O
	Total															
2002-03	6.2	128	1	6.7	6.7	6.7	6.4	6.3	5.4	6.2	5.9	6.1	6.2	6.3	5.1	6.3
2003-04	6.0	135	2	6.6	6.7	6.7		6.4	5.5	5.8	5.6	5.9	5.6		4.6	6.3
2004-05	5.8	129	3	6.5	6.4	6.3		5.7	5.1	5.5	5.5	5.6	5.7		5.0	5.7
2005-06	6.0	128	4	6.6	6.4	6.1		6.3	5.0	6.1	5.3	5.5	6.5		5.0	6.0
2006-07	5.9	127	5	6.8	6.5	6.2		6.6	5.7	5.8	5.6	5.7	5.8		5.6	5.0

## What is the Quality of Individual Classrooms this Year?

Figure I-4 the 2006-07 quality of individual classrooms.



Number of Classrooms Within Score Range by Program													
Score Range	A	B	C	E	F	I	J	K	L	N	O	Total	Percent
1-1.9	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
2-2.9	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
3-3.9	0	0	0	0	0	2	1	0	0	0	2	5	3.9%
4-4.9	0	0	2	0	1	3	3	0	2	0	4	15	11.8%
5-5.9	0	1	2	0	1	8	10	5	6	4	0	37	29.1%
6-6.9	21	5	11	5	1	12	6	1	4	1	3	70	55.1%
7.0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
Total	21	6	15	5	3	25	20	6	12	5	9	127	100.0%

Figure I-4 above shows the quality of each classroom in RECAP by program. There are a number of facts worthy of note:

- 1) No classroom scored lower than minimum standards (a score below 3).
- 2) Sixteen percent of the classrooms scored between minimum standards and good quality (score of 5). Last year this figure was 10%.
- 3) Eighty-four percent of the classrooms had at least good quality (score of 5 and above). Last year this percentage was 90%.

- 4) Fifty-five percent of the classrooms had quality at or above a score of 6 (56% last year).
- 5) Most programs have very few classrooms below a 5.
- 6) Programs A, B, and E have high, homogenous quality level and some (A, C) have a relatively large number of classrooms (n=21 and n=15 respectively).
- 7) The overwhelming majority of students attending classrooms assessed within RECAP were in “good” to “excellent” quality classroom environments.

Combining the information in Figures I-3 and I-4 above we can conclude:

- 1) Some programs have had a large number of classrooms and excellent quality for years. In particular, program A has 21 classrooms and has an impressive mean ECERS-R of 6.8 with a very high level of uniform quality. More importantly, that average uniform level of quality has been maintained for five years. This certainly demonstrates that it is possible to have a large program serving urban preschool children with consistent high quality.
- 2) Smaller programs, such as program B, also have maintained high quality classrooms for the last 5 years.

Over the years RECAP evaluations have repeatedly demonstrated that “One size does not fit all.” Different programs work for different children and families in different ways. There remains one high standard, but the various and diverse RECAP-affiliated programs and schools are required to fit the needs of Rochester’s diverse families. The results presented in these pages again confirm this basic conclusion.

Appendix A in the **RECAP 2006-07 Annual Report Statistical Supplement** shows the distribution of ECERS-R scores by program for each of the areas of the ECERS-R. The interested reader is referred to this supplement.

## Do we see any trends in ECERS-R scores?

The following ECERS-R analysis is included for the purpose of examining possible trends or potential problem areas in our ECERS-R classroom quality processes.

Although programs have maintained a very high level of quality, there have been fluctuations in recent years. Figure I-5 below is a chart to help better understand year to year variation in ECERS-R scores. It shows mean RECAP ECERS-R scores and 95% confidence bands around each mean for the last 8 years.

Figure I-5 displays our history of ECERS-R scores similar to a “statistical process control chart” which is often used for monitoring quality in other high-precision processes such as in business and manufacturing industries. This chart shows the mean, upper, and lower 95% confidence bounds for each year of RECAP ECERS-R scores. The upper and lower bounds are computed as:  $\pm 1.96 * s / (\text{square-root of } n)$ , where  $s$  and  $n$  is the standard deviation and sample size, respectively, of the ECERS-R scores in each year.

Looking at this chart, from 1999-00 through 2002-03, there were 3 straight years of increases in ECERS-R total scores. After that initial period, we have seen the scores go up and down within what might be considered normal fluctuations (variation between upper and lower bounds). *Currently there does not seem to be any significant upward or downward trend in our overall RECAP scores.*

**Figure I-5 ECERS-R means and 95% confidence intervals.**

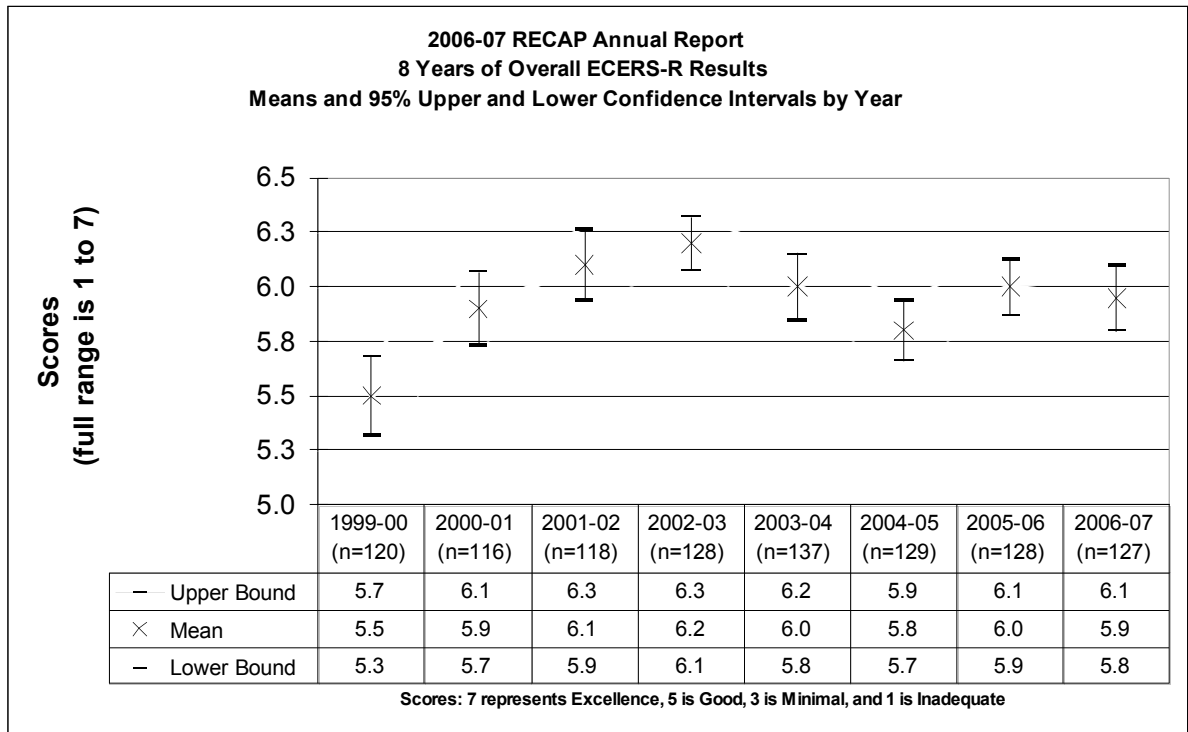


Table I-2 below shows the actual means and standard deviations of RECAP ECERS-R scores for the last 8 years.

<b>Table I-2</b>						
<b>2006-07 RECAP Annual Report</b>						
<b>Eight Years of Overall ECERS-R Scores</b>						
				<b>Mean and 95% Confidence Bands</b>		
	<b>RECAP Year</b>	<b>Number Observations (n)</b>	<b>Standard Deviation (s)</b>	<b>Lower Bound</b>	<b>Mean</b>	<b>Upper Bound</b>
1	1999-00	120	1.0	5.3	5.5	5.7
2	2000-01	116	0.9	5.7	5.9	6.1
3	2001-02	118	0.9	5.9	6.1	6.3
4	2002-03	128	0.7	6.1	6.2	6.3
5	2003-04	137	0.9	5.8	6.0	6.2
6	2004-05	129	0.8	5.7	5.8	5.9
7	2005-06	128	0.7	5.9	6.0	6.1
8	2006-07	127	0.9	5.8	5.9	6.1

### **ECERS-R and RECAP Teaching Experience**

An analysis was conducted again this year to examine the relationship between ECERS-R scores and years of RECAP teaching experience. It can be seen in Table I-3 below that there were 43 teachers in their 1<sup>st</sup> RECAP year, and 41 with six or more years of RECAP experience. We can see in Table I-3 and Figure I-6 below that RECAP teaching experience does reflect upon classroom ECERS-R scores. The mean ECERS-R scores does not rise to the 6.0 level until there is at least 6 years of teaching experience in RECAP classrooms (not including the one teacher this year who had 5 years experience with a score of 6.3).

<b>Table I-3</b>						
<b>2006-07 RECAP Annual Report</b>						
<b>Mean ECERS-R Score by Number of Years RECAP Experience for Classroom Teachers*</b>						
<b># Yrs RECAP Experience</b>	<b>Frequency</b>	<b>Cumulative Frequency</b>	<b>Pct.</b>	<b>Cumulative Pct.</b>	<b>ECERS-R Mean</b>	<b>Standard Deviation</b>
<b>0</b>	43	43	33.9%	33.9%	5.8	0.7
<b>1</b>	15	58	11.8	45.7	5.7	1.1
<b>2</b>	13	71	10.2	55.9	5.5	0.7
<b>3</b>	9	80	7.1	63.0	5.7	0.9
<b>4</b>	5	85	3.9	66.9	5.5	1.7



<b>5</b>	1	86	0.8	67.7	6.3	-
<b>6</b>	11	97	8.7	76.4	6.0	0.8
<b>7</b>	3	100	2.4	78.8	6.6	0.3
<b>8</b>	15	115	11.8	90.6	6.6	0.4
<b>9</b>	12	127	9.5	100.0	6.6	0.3
Note: * If there were co-teachers in a classroom, the teacher with the most experience was counted.						

Table I-4 below shows the number of teachers by years of RECAP experience and by program. Twenty-six of the 41 teachers (about two-thirds) who have 6 or more years of RECAP experience are affiliated with one of only 3 programs: A, B, or C. It is possible that what we are seeing in Table I-3 above and Figure I-6 below is partly a program effect in addition to a teacher effect.

Table I-4			
2006-07 RECAP Annual Report			
Number of Years of RECAP Experience by Program			
Program	# Teachers	# of Years of RECAP Experience	
		# with 6 or more years	# with < 2 years
A	21	14	4
B	6	5	0
C	15	7	5
E	5	1	4
F	3	3	0
I	25	5	16
J	20	2	12
K	6	0	5
L	12	1	9
N	5	3	0
O	9	0	3
<b>Total</b>	127	41	58

Figure I-6 Mean ECERS-R total scores by years of RECAP teacher experience.

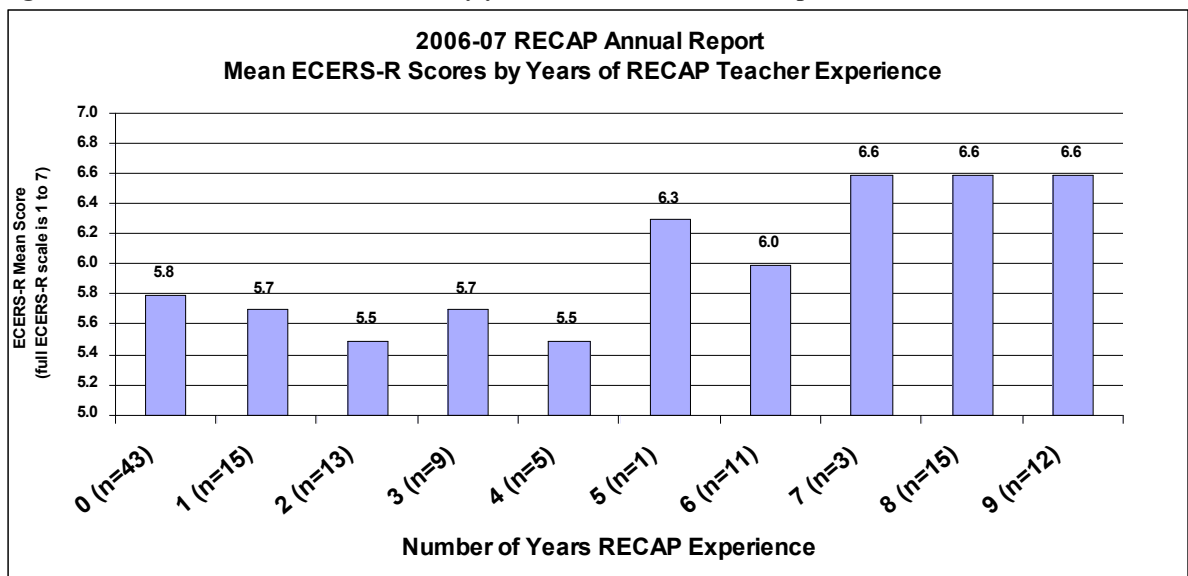


Figure I-7 below shows a comparison between teachers who were new to RECAP during the last 2 years and those with many years of experience. The difference between the new teachers' total ECERS-R scores and those with 6 or more years was 0.7. However, in the routines and activities areas, the difference was larger at 0.9. The smallest difference was seen in the interactions areas at 0.4.

**Figure I-7 ECERS-R scores in 2006-07 for RECAP teachers who were new to RECAP.**

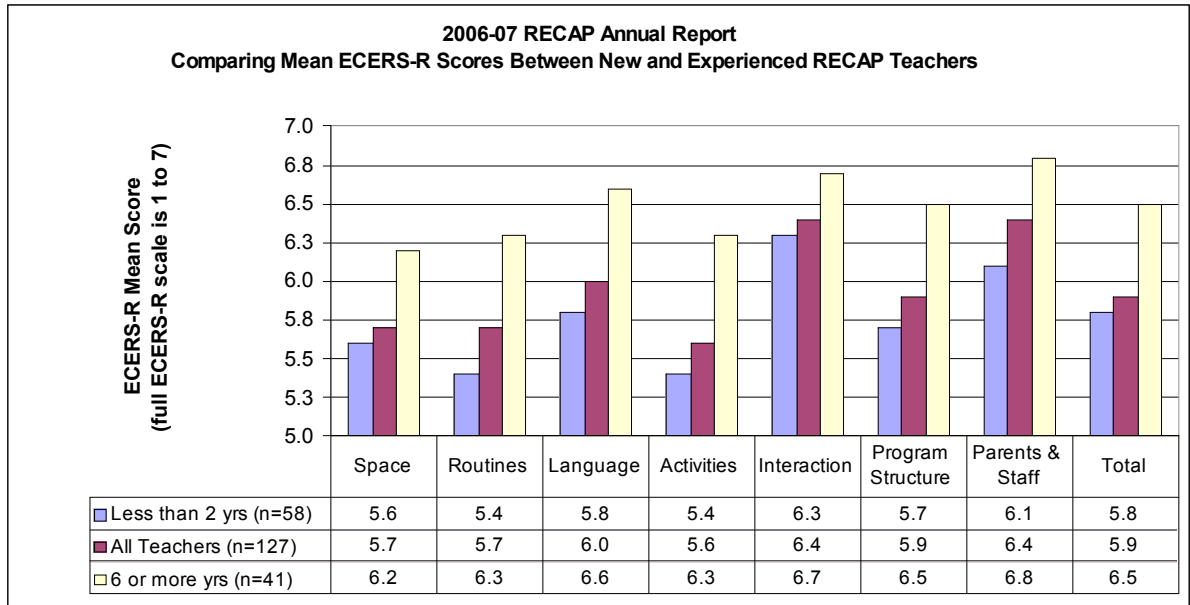
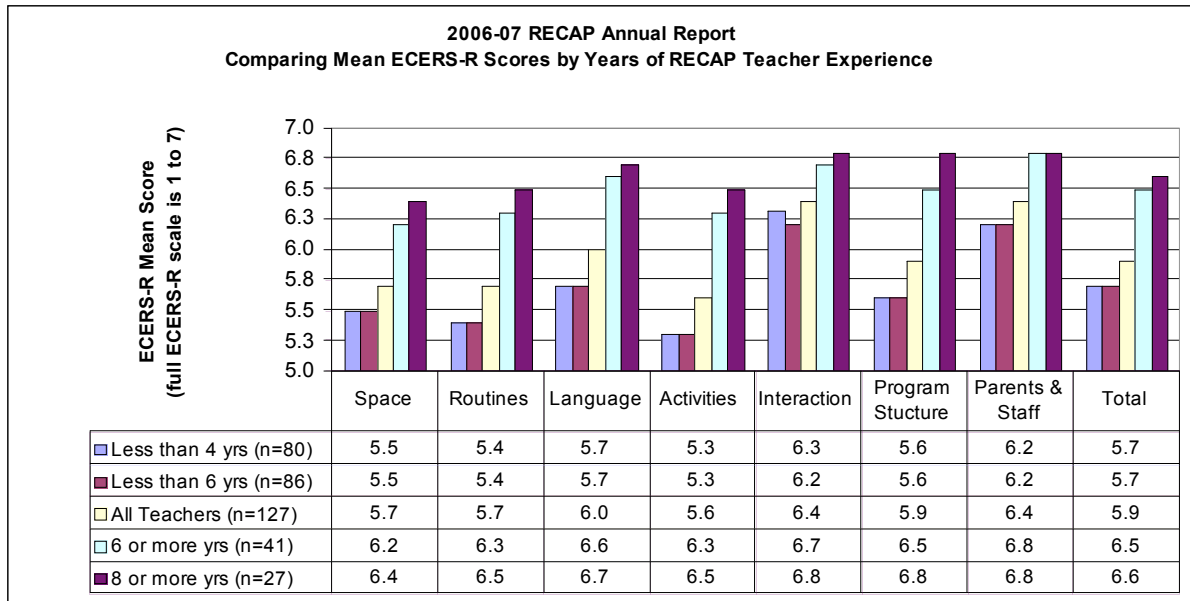


Figure I-8 below shows mean ECERS-R scores for various additional levels of teacher experience. We can see in this chart that teachers with 6 or more years of experience have higher total ECERS-R scores by 0.8 compared to teachers who had fewer than 6 years of experience. However, in some ECERS-R areas such as interaction, the difference was smaller at 0.5. In the activities area the difference between these groups of teachers was 1.0, greater than in total ECERS-R.

**Figure I-8 Comparing ECERS-R area scores in 2006-07 for teachers by years of experience**



Tables labeled I-5 through I-7 in Appendix I of the **RECAP 2006-07 Annual Report Statistical Supplement** show the results from t-Tests comparing ECERS-R scores for teachers with different numbers of years of RECAP experience.

## II. Children's Outcomes

### Section 1 COR – Student Performance

#### How did we measure students' developmental skills?

The Child Observation Record (COR) was developed by High/Scope, which is one of the leading centers in the nation for developing and evaluating materials for young children. It is one of the most widely used developmentally appropriate assessment instruments for teachers serving children ages 2.5 to 6.0 years of age. Trained teachers systematically recorded their observations of children's functioning for 23 items. Children's acquisition of skills was measured on a five-point developmentally sequenced scale with each point representing a level of children's growth along the developmental continuum.

Before teachers use the COR, they must complete COR training. Training is provided for all teachers not previously trained on the COR and for experienced teachers who feel they will benefit from additional training. It is a three-hour session which covers components of the COR, child observation techniques, and hands on training for documenting and scoring. This year, RECAP staff trained 21 prekindergarten teachers and teacher's assistants on the COR.

**For the previous 3 years, RECAP has been transitioning to the latest version of the COR.** Because of this transition period, the following brief description of the COR versions and how we used them has been added.

From 2000-01 through 2003-04, RECAP used a reduced 21 item subset of the full 30-item COR (COR30) that High/Scope developed and published in 1992. Based upon our earlier analyses, the 21 item subset of the COR21 measure had the following three empirical subscales, (Fantuzzo et al, 2002):

#### COR21 Empirical Scales

#### Item Examples

- |                                 |                              |
|---------------------------------|------------------------------|
| 1. Cognitive or Academic Skills | “Reading”                    |
| 2. Coordinated Movement         | “Moving to music”            |
| 3. Social Engagement            | “Relating to other children” |

High/Scope, the authors of the COR, introduced a new 32-item version of COR (COR32) in 2003. In RECAP 2004-05 and 2005-06 we collected all 32 items using COR32 for each student. While we were collecting data which would be used later to factor analyze the COR32, we continued to report COR results using approximations for the 3 subscales used in earlier years with COR21. For RECAP in 2004-05 and 2005-06 we approximated the 3 earlier subscales by matching, as best as possible, each skill item by skill item. Note: The specific items used for each scale are provided in Appendix II Section A. of the **RECAP 2006-07 Annual Report Statistical Supplement**.

*Please note that all COR outcomes reported for 2004-05 and 2005-06 in this year's report are based on using the new COR32 measure and approximating the 3 subscales that were developed with the earlier COR30 as described above.*

**This year's COR outcomes:** Beginning in 2006-07, RECAP introduced and used the new COR23, which is a 23-item subset of High/Scope's COR32. We also introduced the use of 4 new subscales for the COR23 replacing the 3 subscales from earlier years. A description of these changes including the 4 new subscales is included in Appendix II Section B. of the **RECAP 2006-07 Annual Report Statistical Supplement**

Based upon our analyses, the new COR23 measure has the following four empirical subscales, (Hightower, A.D., Gramiak, W., Metzger, A., and Forbes-Jones, E. (2006), *A Factor Analysis of the 32-Item Child Observation Record (COR)*. Children's Institute, Technical Report No.T06-0001.):

### **COR23 Empirical Scales**

### **Item Examples**

- |                        |                                      |
|------------------------|--------------------------------------|
| 1. Initiative & Social | “Relating to other children”         |
| 2. Movement & Music    | “Moving to music”                    |
| 3. Language & Literacy | “Reading”                            |
| 4. Math & Science      | “Identifying materials & properties” |

As mentioned above, for 2006-07, we collected data using the new COR23 with four subscales. The alpha reliability (internal consistency) for the COR subscales in 2006-07 were found to be very high:

- 0.91 (n=1989) for COR Initiative & Social
- 0.88 (n=1983) for COR Movement & Music
- 0.86 (n=1932) for COR Language & Literacy
- 0.93 (n=1906) for COR Math & Science

### **At what level did students enter prekindergarten and how much did they improve by the end of the school year?**

Overall, we can see in Table II-1 below that the time 1 mean scores ranged between 2.10 and 2.76 depending upon the subscale. The mean changes ranged between 1.06 and 1.23 depending upon the skills area.

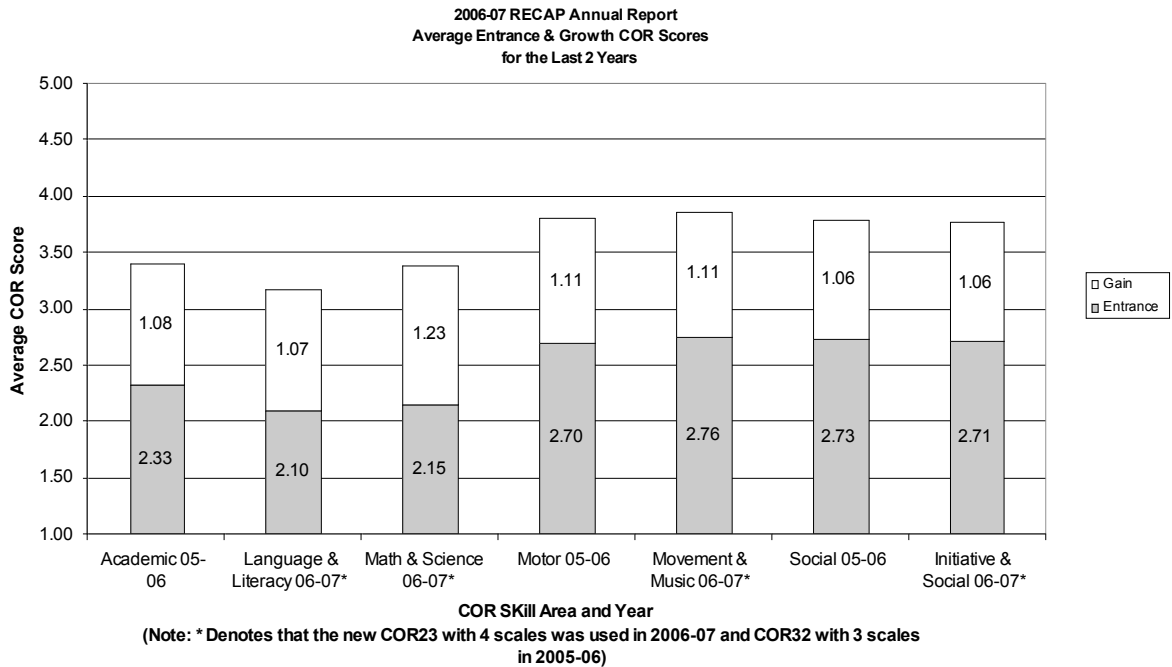
Table II-1						
2006-07 RECAP Annual Report						
2006-07 Time 1 COR and COR Changes <sup>1</sup>						
Skill Area	Time 1			Change Scores <sup>2</sup>		
	N	Mean	Std. Dev.	N	Mean	Std. Dev.
<b>Initiative &amp; Social</b>	2047	2.70	0.84	1584	1.06	0.70
<b>Movement &amp; Music</b>	2047	2.76	0.85	1583	1.11	0.81
<b>Language &amp; Literacy</b>	2039	2.10	0.79	1576	1.07	0.74
<b>Math &amp; Science</b>	2028	2.15	0.95	1568	1.23	0.91

Note:

<sup>1</sup> This data includes children of all ages in RECAP.

<sup>2</sup> Change scores presented here only includes students who had complete fall and spring measures from the same classroom/teacher. There were far more pupils who actually attended the RECAP-affiliated programs.

Figure II-1 Average entrance COR scores and average growth scores for the last 2 years



Looking at Figure II-1 above, in 2006-07, students grew 1.06 points or higher in all four areas. This year the student entrance COR scores for Movement & Music and Initiative & Social were about the same compared to the previous year. The student entrance COR scores for Language & Literacy and Math & Science were a little lower when compared to the comparative Academic subscale of the previous year. This may be due to the use of different COR items in calculating the subscales this year.

### **What is the change in the COR expected by aging alone?**

High/Scope, for the Child Observation Record, does not report the average increases for either the total score or the subscales due to development/aging. The average duration between time 1 and time 2 data collection was 7 months, from October to May, so a portion of the 1.06 to 1.23 growth seen in Figure II-1 is simply the result of developing and growing older. A rough indicator of the impact of aging on the COR, used in previous years, can be calculated as the average difference at time 1 between students who were seven months apart. To calculate this indicator, a regression was run between the time 1 COR subscale scores and age. Based on the information from the regression, the average increase in COR by students who were 7 months older was used as the expected value due to aging. This procedure was used in previous years. The regression coefficients this year were 0.51, 0.44, .54 and 0.51 for Initiative & Social, Movement & Music, Language & Literacy, and Math & Science subscales respectively; resulting in 7 month developmental growth estimates of 0.30, 0.26, 0.32, and 0.30 for each respective subscale.

The adjustment procedure can be criticized because it assumes that the entrance level of students is equivalent to the average gain in a specific period of time. Admittedly, it is a flawed estimate, but we believe it to be better than not attempting to correct for developmental change at all. When the phrase “at or above expectations” is used it should not be confused with “meeting state standards” or other similar outside criteria. Expectations here are formed by the scores of the students entering prekindergarten and are not criterion-referenced to any standard.

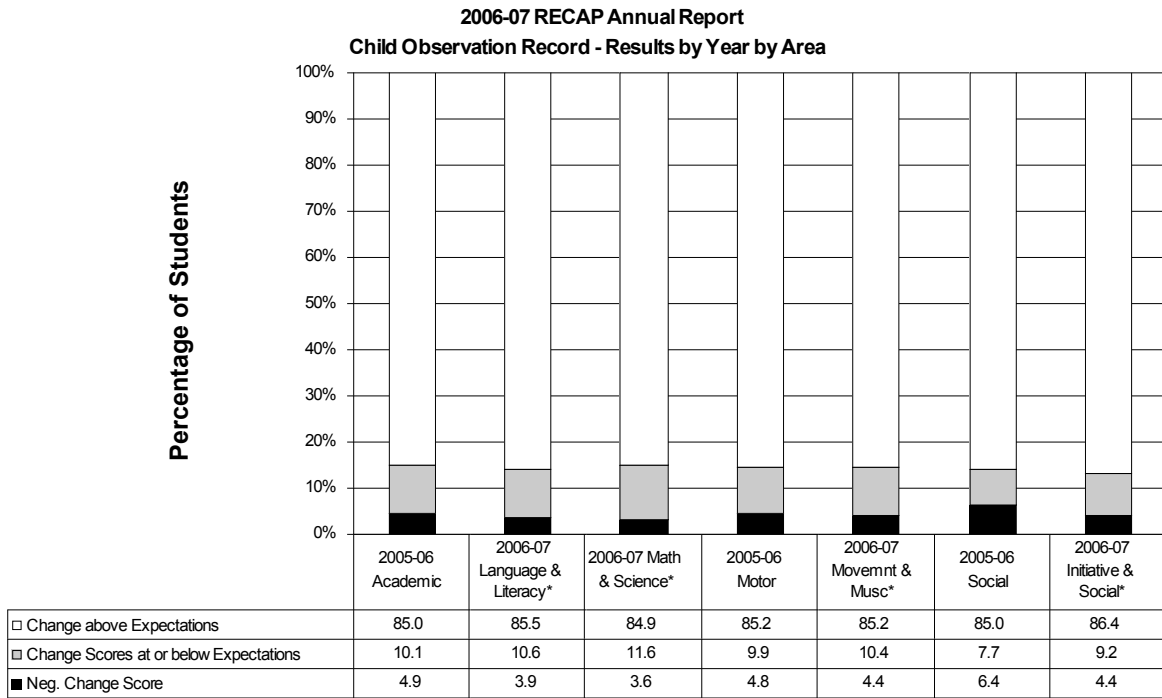
### **How were the COR child outcomes results this year compared to expectations?**

Figure II-2 below shows the proportion of students who had growth above the expected level and those whose growth was negative.

More than 80% of the students had COR change scores above developmental expectations. Only a small percentage of students show negative change.



Figure II-2 COR results compared to expectations by area and by year

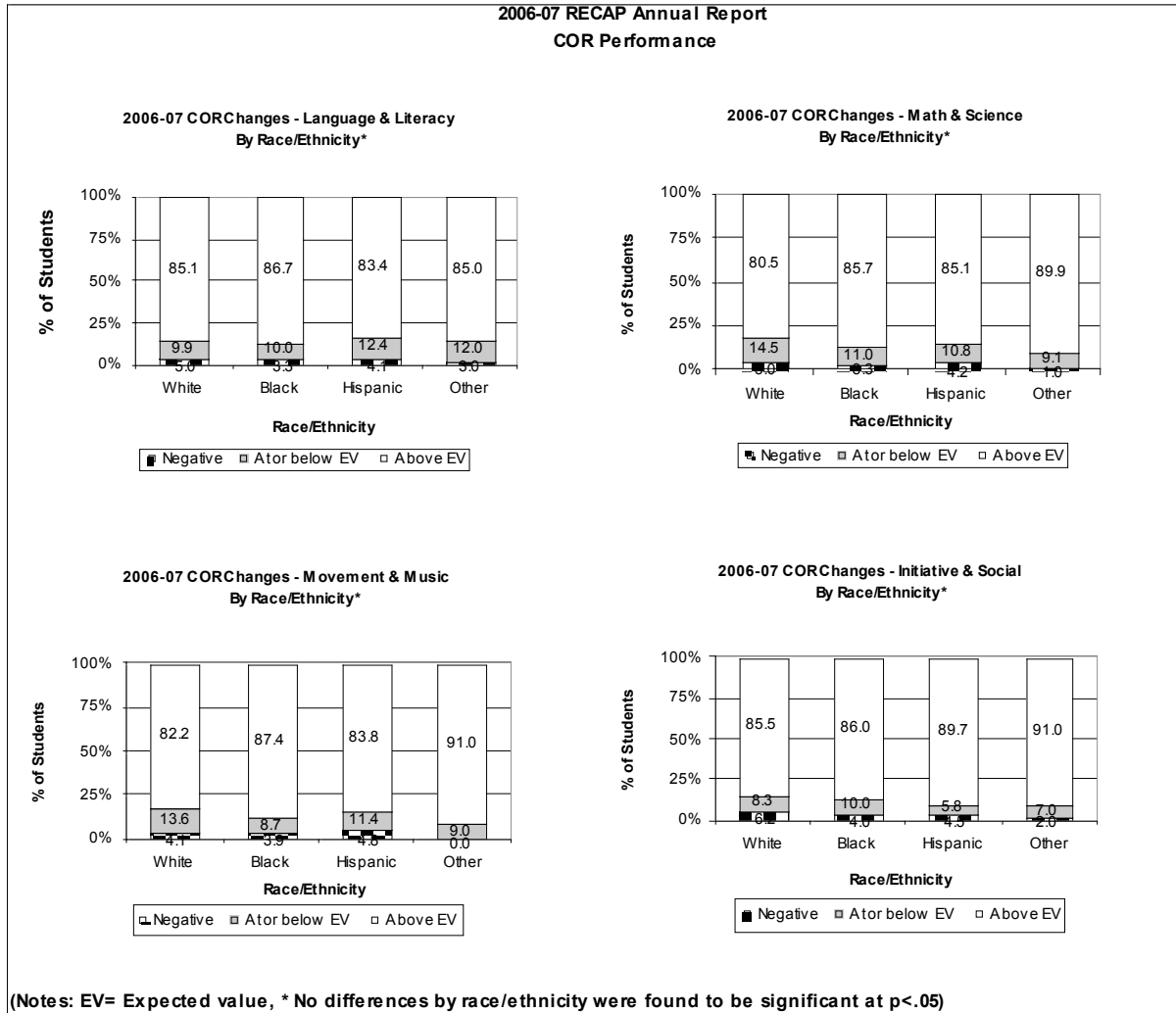


(Note: \* Signifies that the new COR23 with 4 scales was used in 2006-07 and  
 COR32 with 3 scales in 2005-06)

## Are there any differences in outcomes by Race/Ethnicity?

This year, based upon Pearson Chi-Square tests, we found no significant differences by race/ethnicity. This year's COR changes by race/ethnicity are shown in Figure II-3 below.

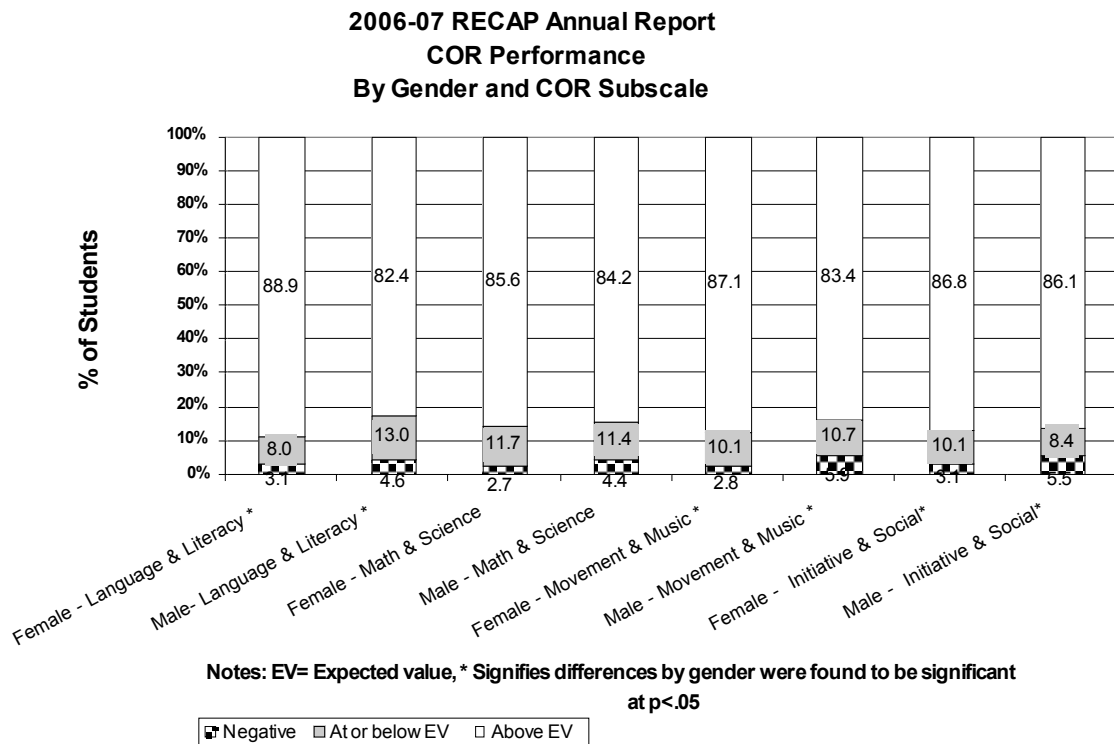
Figure II-3 2006-07 COR growth by Race/Ethnicity.



## Are there any differences in the COR outcomes by gender?

This year, we found detectable differences by gender in the growth of the Language & Literacy, Movement & Music, and Initiative & Social Relations COR subscales. Significant differences were not seen only in the Math & Science subscale. Female students grew above expectations significantly more than male students in the Language & Literacy skills (Pearson  $\chi^2 = 13.4$ ,  $p < .05$ ), Movement & Music (Pearson  $\chi^2 = 9.4$ ,  $p < .05$ ) and in Initiative & Social Relations (Pearson  $\chi^2 = 6.8$ ,  $p < .05$ ). From Figure II-4 below it can be seen that girls actually grew above expectations more than boys in all 4 subscales, the Chi-square test differences were significant in 3 of the 4 subscales.

Figure II-4 2005-06 COR Growth by Gender



## COR Scores by Age Group

The purpose of the following analysis is to see what impact student age had on total COR scores. Table II-2 below displays the pre and post period total COR scores by age group and by year.

**Table II-2 COR scores by age group for all programs**

2006-07 RECAP Annual Report								
Total COR Scores by Age Group for All Programs								
Score Range	2005-06				2006-07			
	Pre		Post		Pre		Post	
	Number of 3 Year Olds	Number of 4 Year Olds	Number of 3 Year Olds	Number of 4 Year Olds	Number of 3 Year Olds	Number of 4 Year Olds	Number of 3 Year Olds	Number of 4 Year Olds
1.0 - 1.4	117	71	16	2	102	79	21	5
1.5 - 2.4	179	538	131	53	260	631	128	94
2.5 - 3.4	103	670	185	357	126	576	177	323
3.5 - 4.4	120	185	63	679	24	213	133	675
4.5 - 5.0	0	26	11	298	0	12	12	264
<b>Total Count</b>	519	1490	406	1389	512	1511	471	1361
<b>Mean Score</b>	2.01	2.65	2.77	3.81	2.10	2.59	2.92	3.76

Table II-3 shows that in 2006-07, the 3-year-olds gained 0.91 in total COR score and the 4-year-olds gained an average 1.17.

**Table II-3 COR growth by age group for all programs**

2006-07 RECAP Annual Report				
Total COR Growth by Age Group for All Programs				
Change Range	2005-06		2006-07	
	Gain		Gain	
	Number of 3-Year-Olds	Number of 4-Year-Olds	Number of 3-Year-Olds	Number of 4-Year-Olds
Less than 0	22	36	24	29
0.00 - 0.49	51	144	66	137
0.50 - 0.74	41	118	63	157
0.75 - 1.00	63	198	68	195
Greater than 1.00	131	703	167	668
<b>Total Count</b>	308	1199	388	1186
<b>Mean Score Change</b>	0.93	1.16	0.91	1.17

Table II-4 below shows the percentage of students that were successful. “Successful” students are defined as those with gains of 0.50 points or greater on one or more of the COR subscales. The percentage of 4-year-olds that were successful in 2006-07 was 96%. The percentage of 3-year-olds that were successful was 93%.

**Table II-4 Student success rates as measured by COR growth**

<b>2006-07 RECAP Annual Report</b>				
<b>Student Success Rates as Measured by Total COR Growth</b>				
<b>Students with pre-post matches, who had gains of 0.50 points or greater on one or more of the COR subscales*</b>				
	<b>2005-06</b>		<b>2006-07</b>	
	<b>Number of 3-Year-Olds</b>	<b>Number of 4-Year-Olds</b>	<b>Number of 3-Year-Olds</b>	<b>Number of 4-Year-Olds</b>
<b>Total Count</b>	308	1199	388	1186
<b>Total Successful</b>	278	1113	360	1133
<b>Percent</b>	90%	93%	93%	96%
Note: * Signifies that in 2005-06 there were 3 subscales used with COR32 and in 2006-07 4 subscales were used with COR23.				

From the t-tests between group means in Table II-5 we can see, as expected, that there are significant differences in COR group means between three-year-olds and four-year-olds.

**Table II-5 t-Tests Comparing 3-Year-Olds with 4-Year-Olds**

<b>2006-07 RECAP Annual Report</b>							
<b>t-Tests Comparing 2005-06 3-Year-Olds with 4-Year-Olds</b>							
	<b>Group of 3-Year-Olds</b>			<b>Group of 4-Year-Olds</b>			<b>Differences in Age Groups</b>
	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Differences<sup>1</sup></b>
<b>COR Total Time 1</b>	416	2.01	0.72	1490	2.65	0.75	<b>+0.64</b>
<b>COR Total Time 2</b>	406	2.77	0.81	1389	3.81	0.72	<b>+1.04</b>
<b>COR Total Growth<sup>2</sup></b>	308	0.93	0.65	1199	1.16	0.67	<b>+0.23</b>
<b>t-Tests Comparing 2006-07 3-Year-olds with 4-Year-olds</b>							
	<b>Group of 3-Year-Olds</b>			<b>Group of 4-Year-Olds</b>			<b>Differences in Age Groups</b>
	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Differences<sup>1</sup></b>
<b>COR Total Time 1</b>	512	2.10	0.73	1511	2.59	0.74	<b>+0.49</b>
<b>COR Total Time 2</b>	471	2.92	0.87	1361	3.76	0.77	<b>+0.84</b>
<b>COR Total Growth<sup>2</sup></b>	388	0.91	0.63	1186	1.17	0.66	<b>+0.26</b>
Notes: <sup>1</sup> Denotes all differences were significant at Pr (t) <=.05							
<sup>2</sup> Growth was based on only those students who had matching pre and post scores.							

## **Section 2 T-CRS – Students at Risk for Socio-Emotional Problems**

### **How did we measure socio-emotional competencies and problems?**

The Teacher-Child Rating Scale (T-CRS) consists of 32 items assessing different aspects of a child's socio-emotional adjustment. Items are grouped into four empirically derived and confirmed scales assessing:

- 1) Task Orientation
- 2) Behavior Control
- 3) Assertiveness
- 4) Peer Social Skills

Each of these scales contains 8 items: four positively and four negatively worded items. All items are measured on a 5-point Likert scale according to how much the teacher agrees each item describes the child. Normative Tables are provided for urban, suburban, and rural; male and female. On the national norming sample the T-CRS alpha coefficients of internal consistency range from .87 to .98 with a median of .94. Studies correlating the T-CRS with the Walker-McConnell and Achenbach's scales suggest strong convergent and divergent concurrent and construct validity (Perkins, P.E. & Hightower, A.D. (1999, 2001).

Students who scored below the 15 percentile (approximately 1 standard deviation) in any T-CRS subscale were considered to be at risk in that particular area.

The alpha reliabilities (internal consistency) of the T-CRS subscales this year were:

- 0.91 (n=2198) for Task Orientation
- 0.93 (n=2180) for Behavior Control
- 0.93 (n=2189) for Peer Sociability
- 0.89 (n=2183) for Assertive Social Skills.

### **How many students have socio-emotional risk factors at entrance into prekindergarten?**

Table II-6 below shows the percentage of students with socio-emotional risk factors at entrance into pre-kindergarten: 12% of students enter preschool with multiple socio-emotional risk factors, and an additional 11% enter preschool with a single socio-emotional risk factor.

Table II-6 displays the number of students with socio-emotional risk factors at time 1.

<b>Table II-6</b>				
<b>Number of Students with Socio-Emotional Risk Factors at Time 1</b>				
	<b>2005-06</b>		<b>2006-07</b>	
	<b>Frequency</b>	<b>Percentage*</b>	<b>Frequency</b>	<b>Percentage*</b>
<b>No risk factors</b>	1,574	77.3%	1,704	76.9%
<b>Behavior control only</b>	57	2.8	72	3.2
<b>Assertive social skills only</b>	57	2.8	57	2.6
<b>Peer sociability only</b>	50	2.5	35	1.6
<b>Task orientation only</b>	67	3.3	75	3.4
<b>Multiple risk factors</b>	231	11.3	273	12.3
<b>Number of valid responses</b>	2,036	-	2,216	-
<b>Total RECAP students</b>	2,531	-	2,694	-
<b>Notes: * Signifies that percentage is calculated from number of valid responses.</b>				

### **Student demographics and the prevalence of risk factors**

This year there were no gender differences found in the number of socio-emotional risk factors by risk factor type at entrance into prekindergarten, but race/ethnicity differences were seen.

A cross tabulation of gender with the number of risk factors was performed to determine if there was a difference in the risk factors by gender. No significant association was found ( $\chi^2 = 9.286, p > .05$ ). Four percent of boys had a behavior control risk factor compared to about 3% of the girls. However, as seen in Table II-7 below, the total number of risk factors was very similar between genders; for both boys and girls, 24% of the boys had 1 more risks factors compared to 23% of the girls in 2006-07.

<b>Table II-7</b>					
<b>2006-07 RECAP Annual Report</b>					
<b>Number of Students with T-CRS Socio-emotional Risk Factors at Time1</b>					
<b>by Gender</b>					
	<b>#Boys</b>	<b>Boys Pct.</b>	<b>#Girls</b>	<b>Girl Pct.</b>	<b>Total</b>
<b>No Risk Factors</b>	888	76.5%	816	77.4%	1,704
<b>Behavior Control Only</b>	44	3.8	28	2.7	72
<b>Assertive Social skills Only</b>	24	2.1	33	3.1	57
<b>Peer Sociability Only</b>	20	1.7	15	1.4	35
<b>Task Orientation Only</b>	32	2.8	43	4.1	75
<b>Multiple Risk Factors</b>	153	13.2	120	11.4	273
<b>Number of Valid Responses</b>	1,161		1,055		2,216



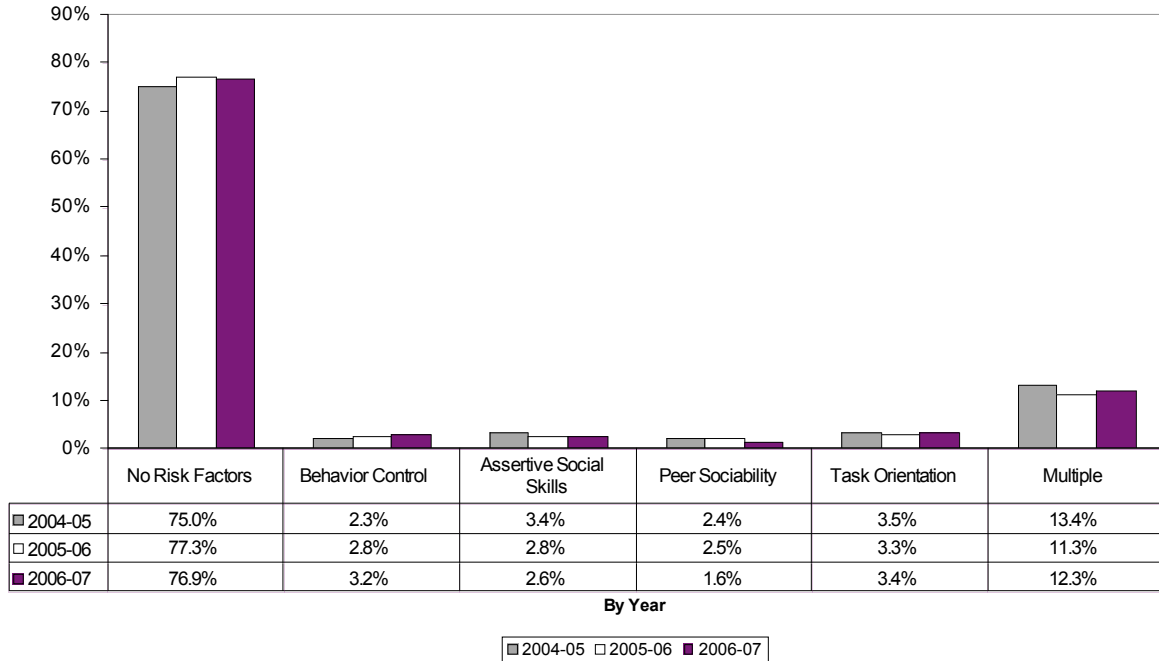
Another cross tabulation of race/ethnicity with the number of risk factors was performed to determine if there were race/ethnicity differences. Statistically significant associations were found ( $\chi^2= 38.242$ ,  $p<.05$ ) this year.

As seen in table II-8 below, about 30% of the white students had 1 or more risk factors identified this year. For Black students this percentage was 23% and 21% for Hispanic students. White students had 18% with multiple risks compared to 13% for Black students and 10% for Hispanic.

<b>Table II-8</b>									
<b>2006-07 RECAP Annual Report</b>									
<b>T-CRS Socio-emotional Risk Factors at Time1</b>									
<b>By Race/Ethnicity</b>									
	<b>White</b>		<b>Black</b>		<b>Hispanic</b>		<b>Other</b>		<b>Total</b>
	<b>#</b>	<b>Pct.</b>	<b>#</b>	<b>Pct.</b>	<b>#</b>	<b>Pct.</b>	<b>#</b>	<b>Pct.</b>	<b>#</b>
<b>No Risk Factors</b>	197	70.1%	814	76.6%	292	78.9%	109	80.7%	1412
<b>Behavior Control Only</b>	11	3.9%	36	3.4%	14	3.8%	0	0.0%	61
<b>Assertive Social skills Only</b>	5	1.8%	21	2.0%	15	4.1%	4	3.0%	45
<b>Peer Sociability Only</b>	13	4.6%	12	1.1%	4	1.1%	2	1.5%	31
<b>Task Orientation Only</b>	5	1.8%	45	4.2%	8	2.2%	5	3.7%	63
<b>Multiple Risk Factors</b>	50	17.8%	135	12.7%	37	10.0%	15	11.1%	237
<b>Number of Valid Responses</b>	281		1063		370		135		1849

**Figure II-5 Prevalence of socio-emotional risk factors at entrance into prekindergarten for the last 3 years.**

**2006-07 RECAP Annual Report  
Prevalence of Socio-Emotional Risk Factors**



From looking at Figure II-5 above, there do not appear to be any noticeable changes in the percentage of students with any of the socio-emotional risk factors this year, when compared to the previous two years. There does appear to be random fluctuation in the year-to-year numbers.

**Do students with socio-emotional problems have a different academic, social and motor profile at entrance into prekindergarten?**

A one-way multivariate analysis of covariance (MANCOVA) was conducted to determine the association between time 1 socio-emotional risk status and time 1 COR subscales while controlling for race/ethnicity and gender. Just as in the previous two year’s findings, there were significant differences in the average COR scores by time 1 socio-emotional risk status (Wilks’ Lambda = 0.865, F(20,6070)=13.615, p<.001).

Figures II-6 and II-7 below graphically displays differences in initial COR scores by initial risk status for the past 2 years.

Figure II-6 2005-06 initial COR scores by socio-emotional risk status.

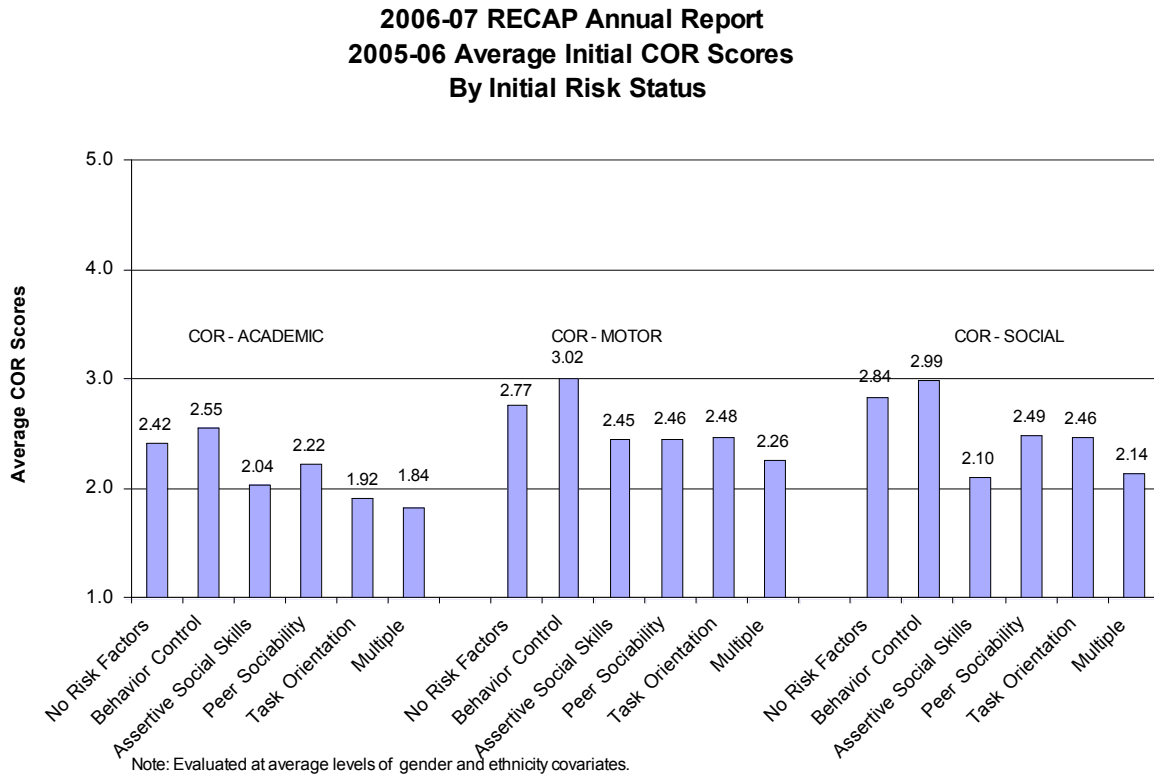


Figure II-7 2006-07 initial COR scores by socio-emotional risk status.

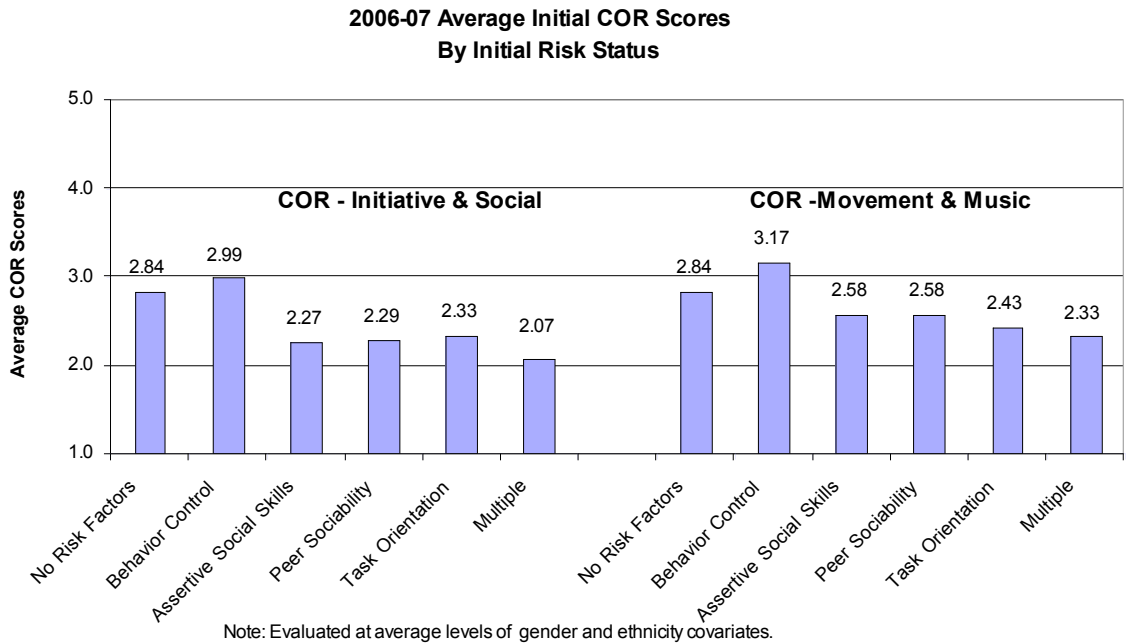
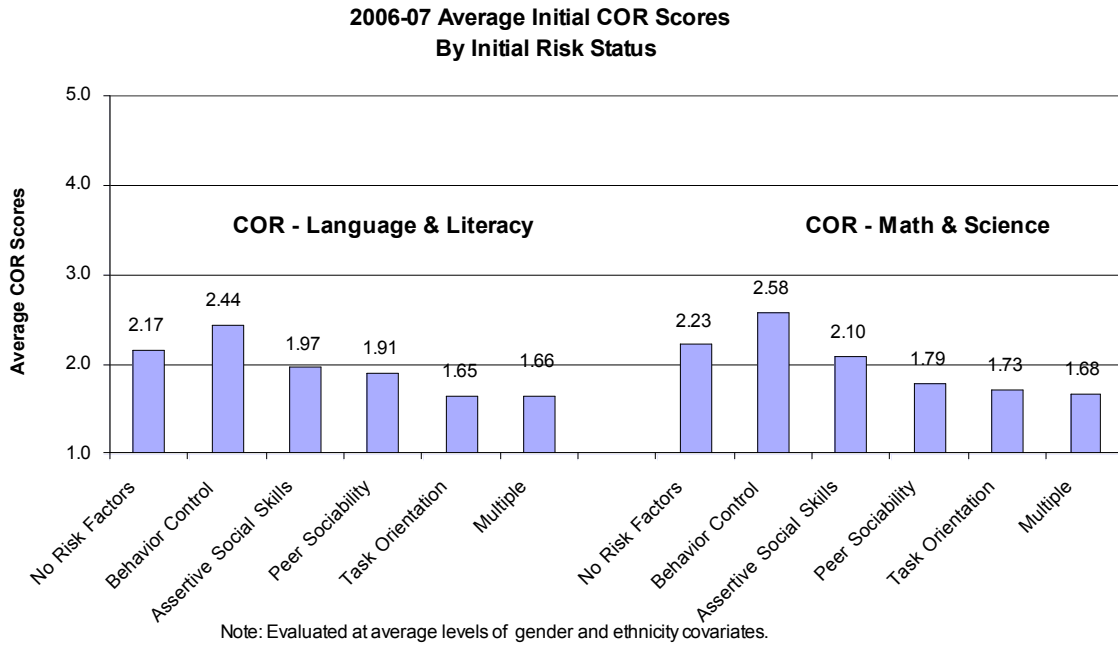


Figure II-8 2006-07 initial COR scores by socio-emotional risk status.



<b>Table II-9</b>				
<b>RECAP 2006-07 Annual Report</b>				
<b>Number of Students with Socio-Emotional Risk Factors and COR scores at Time 1</b>				
	<b>2005-06</b>		<b>2006-07</b>	
	<b>Frequency</b>	<b>Percentage*</b>	<b>Frequency</b>	<b>Percentage*</b>
<b>No risk factors</b>	1339	77.2%	1408	76.4%
<b>Behavior control only</b>	51	2.9	61	3.3
<b>Assertive social skills only</b>	47	2.7	45	2.4
<b>Peer sociability only</b>	48	2.8	31	1.7
<b>Task orientation only</b>	58	3.3	63	3.4
<b>Multiple risk factors</b>	191	11.0	235	12.8
<b>Number of valid responses</b>	1734	-	1843	-
<b>Total RECAP children</b>	2531	-	2694	-

Notes: \* Signifies percentage is calculated from number of valid responses.

Pairwise comparisons were used to reveal some interesting patterns. For the past 4 years, we have seen that students with a single risk factor at time 1 are generally rated lower than students with no risk factors with one exception: if the risk is behavior control.



This year, students with behavior control issues, but no other risk factors, rated similarly, or higher, to students with no risk factors in social, motor, literacy, and math skills. This is now 4 consecutive years that we have seen these phenomena.

Pairwise comparisons results in 2006-07: for Initiative & Social, no risk factors compared with behavior risk, the mean difference =-0.327, std. error=.104,  $p>.05$ ; for Movement & Music, no risk factors compared with behavior risk, the mean difference =-0.327, std. error=.109,  $p<.05$ ; for Language & Literacy, no risk factors compared with behavior risk, the mean difference =-.279, std. error=.097,  $p<.05$ ; and for Math & Science, no risk factors compared with behavior risk, the mean difference =-.350, std. error=.119,  $p<.05$ .

However, in the main, we can see in Figures II-6 through II-8 above that those students with multiple socio-emotional risk factors at time 1 had fewer skills than students with no risk factors. This year, students having multiple risk factors were consistently found to have fewer skills than students having a single risk factor, for each and every risk factor.

**Demographic differences in outcomes for students with risk factors** - Just as in prior years, the demographic characteristics of the students, controlling for the time 1 socio-emotional risk profile, were significantly correlated with the outcomes examined.

**Race/Ethnicity differences** - This year, differences on the individual COR subscales were seen for race/ethnicity groups. Black students with risk factors were found to have scored about 0.2 lower than non-Black at-risk students in the means in all 4 subscales. The same was true for Hispanic students. Considering that the standard deviation for COR scores is about 0.8, the actual effect size for the academic and social skills is about 0.3 (0.2 divided by 0.8). For differences on the individual COR subscales, white students were not found to be different than non-white.

MANCOVA race/ethnicity results:

For Black students: social  $b=-0.245$ ,  $t=-3.356$ ,  $p<.05$ ; motor  $b=-0.253$ ,  $t=-3.303$ ,  $p<.05$ ; literacy  $b=-0.152$ ,  $t=-2.233$ ,  $p<.05$ ; math  $b=-0.199$ ,  $t=-2.375$ ,  $p<.05$ .

For Hispanic students: social  $b=-0.293$ ,  $t=-3.641$ ,  $p<.05$ ; motor  $b=-0.238$ ,  $t=-2.827$ ,  $p<.05$ ; literacy  $b=-0.194$ ,  $t=-2.588$ ,  $p<.05$ ; math  $b=-0.198$ ,  $t=-2.150$ ,  $p<.05$ .

For white students: social  $b=-0.126$ ,  $t=-1.500$ ,  $p>.05$ ; motor  $b=-0.074$ ,  $t=-0.837$ ,  $p>.05$ ; literacy  $b=0.099$ ,  $t=1.260$ ,  $p>.05$ ; math  $b=-0.112$ ,  $t=0.096$ ,  $p>.05$ .

For multivariate tests, evaluating all 4 COR subscales together, all of the 3 largest race/ethnicity groups were significant:

For Black students: Wilks' lambda = 0.993,  $F(4,1830)=3.232$ ,  $p<.05$

For Hispanic students: Wilks' lambda = 0.992,  $F(4,1830)=3.587$ ,  $p<.05$

For White students: Wilks' lambda = 0.990,  $F(4,1830)=4.483$ ,  $p<.05$

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**Gender differences** - Gender differences in this analysis were once again seen this year: male students scored lower than females with comparable risk factors in all 4 subscales. Boys at-risk were 0.2 lower in Initiative & Social and Language & Literacy compared to girls. They were also lower by about 0.1 in Movement & Music and Math & Science. Similar differences were also seen in the last 3 years.

For the multivariate tests, when evaluating all 4 COR subscales together: gender differences were seen again this year where the Wilks' lambda = 0.972,  $F(4,1830)=13.224$ ,  $p<.05$ . For parameter estimates when evaluating gender for each subscale: social:  $b=-0.281$ ,  $t=-5.848$ ,  $p<.05$ ; motor:  $b=0.140$ ,  $t=3.582$ ,  $p<.05$ ; literacy:  $b=0.193$ ,  $t=5.563$ ,  $p<.05$  and for math:  $b=0.129$ ,  $t=3.037$ ,  $p<.05$ .

### **What do these results regarding socio-emotional risks and initial COR skills mean?**

Students who arrive in the fall with multiple socio-emotional risk factors are likely to also arrive with lower levels of social, motor, literacy, and math skills. For the past 4 years, we have seen that students with a single risk factor at time 1 are generally rated lower than students with no risk factors with one exception: if the risk is behavior control. Students with behavior control issues, but no other risk factors, were usually rated similarly to students with no risk factors in the social, motor, language, and math areas.

Males and students of Black and Hispanic race/ethnicity have additional risk, which supports previous studies and research.

### **Do students with socio-emotional problems have a different pattern of growth during prekindergarten?**

A one-way multivariate analysis of covariance (MANCOVA) was conducted to determine the association between time 1 risk factor statuses and COR change scores while controlling for race/ethnicity and gender status. This year, there were significant differences in the COR growth scores by the time 1 socio-emotional risk status (Wilks' Lambda = 0.964,  $F(20,4750)=2.635$ ,  $p<.05$ ).

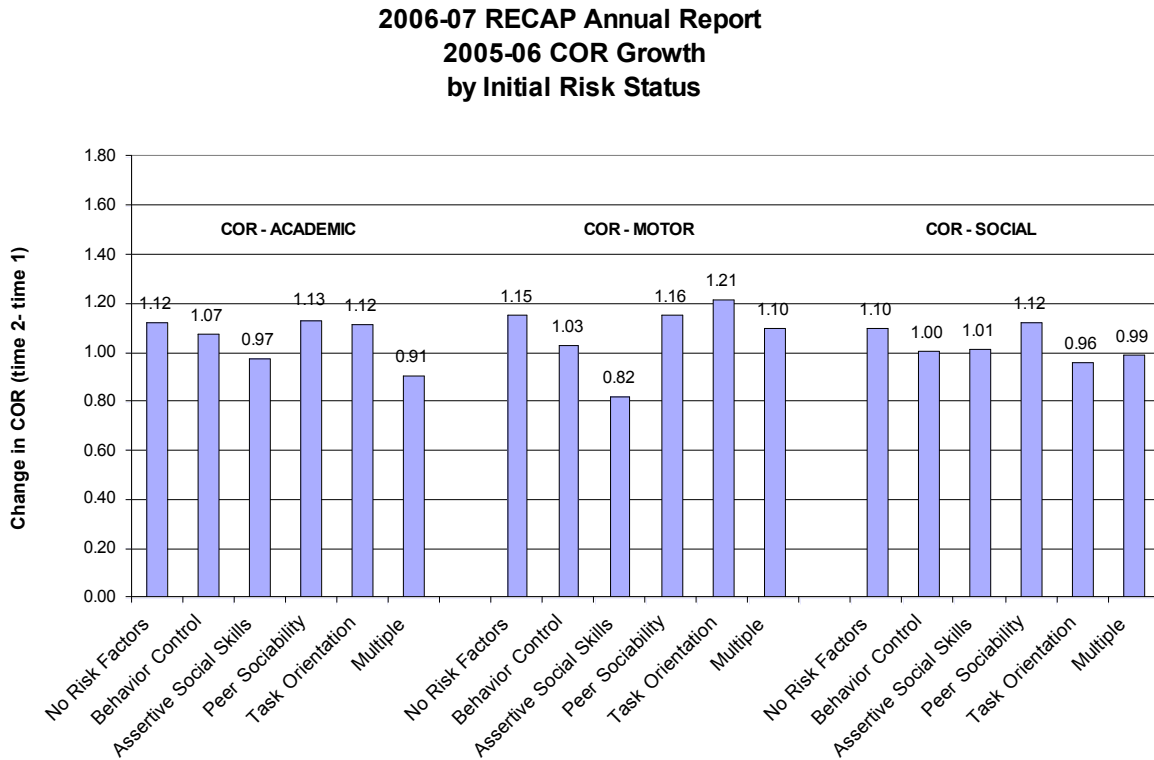
Last year, there were also significant differences in the COR growth scores by time 1 socio-emotional risk status (Wilks' Lambda = 0.978,  $F(15,3711)=1.982$ ,  $p<.05$ ).

In Figures II-10 and II-11 below we can see this year's pairwise comparisons, based on means adjusted for race/ethnicity and gender. These results demonstrate that students who had initial multiple socio-emotional risks grew approximately the same or a greater amount during the academic year in all 4 areas compared to students who initially presented no socio-emotional risk factors. Figure II-9 below shows comparable results from 2005-06.

Table II-10 below shows the actual number of students by each risk status in this analysis.

Another observation from Figures II-10 and II-11 below is that students who had a single assertive social skills risk factor had greater increases in COR growth for all 4 COR subscales, when compared to students with other risk factors or no risk factors. Figure II-9 does not show this same result for assertive social skills in 2005-06.

**Figure II-9 2005-06 COR Change scores by socio-emotional risk status**



**Note: Marginal means evaluated at average levels of the gender and race/ethnicity covariates.**

Figure II-10 2006-07 COR Change scores by socio-emotional risk status

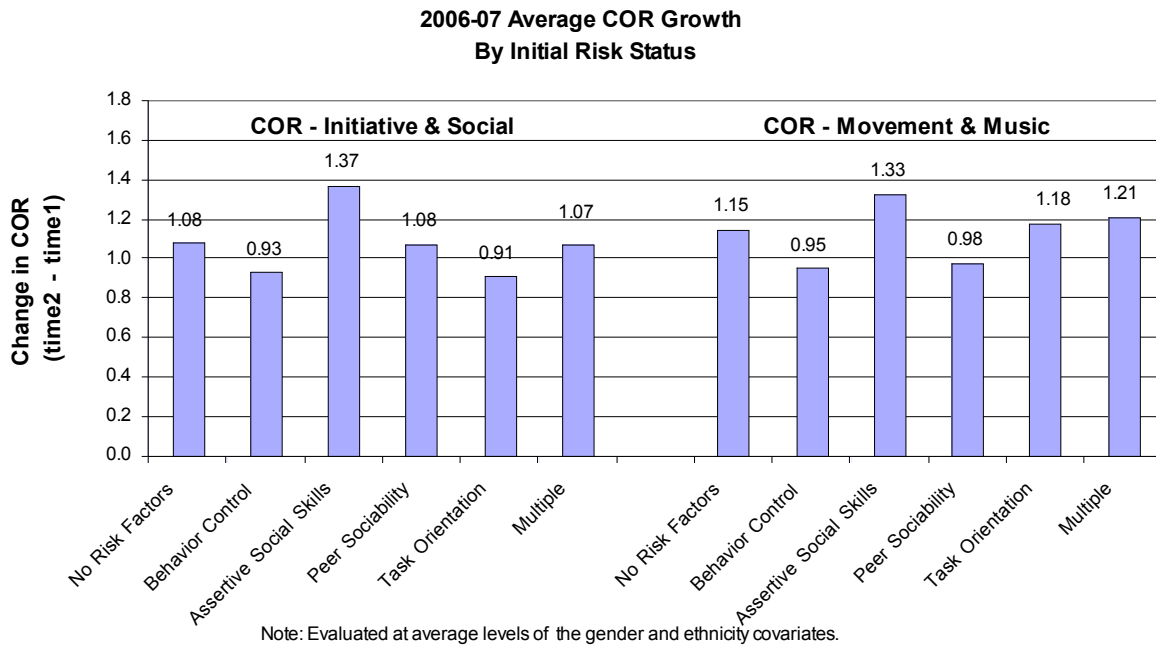
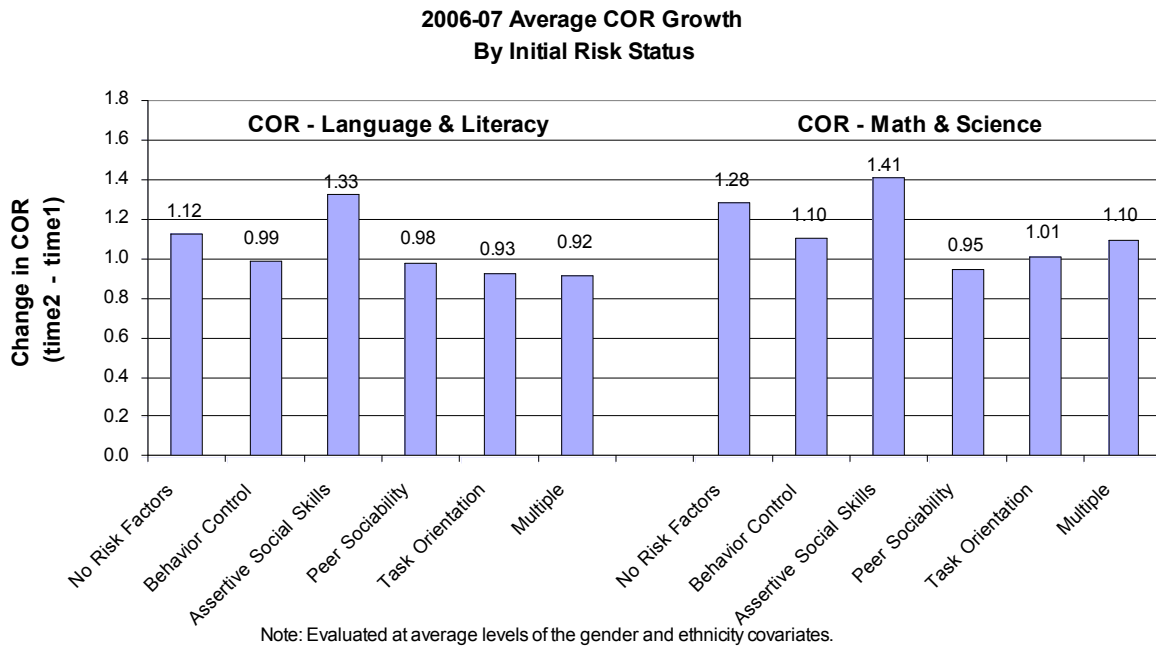


Figure II-11 2006-07 COR Change scores by socio-emotional risk status





**Table II-10 students with socio-emotional risk factors and COR scores at time 1 and time 2.**

<b>Table II-10</b>				
<b>2006-07 RECAP Annual Report</b>				
<b>Number of Students with T-CRS Socio-Emotional Risk Factors and COR scores at time 1 and time 2</b>				
	<b>2005-06</b>		<b>2006-07</b>	
	<b>Frequency</b>	<b>Percentage<sup>1</sup></b>	<b>Frequency</b>	<b>Percentage<sup>1</sup></b>
No risk factors	1,058	78.0%	1,108	76.7%
Behavior control only	37	2.7	51	3.5
Assertive social skills only	36	2.7	40	2.8
Peer sociability only	43	3.2	27	1.9
Task orientation only	43	3.2	38	2.6
Multiple risk factors	139	10.3	181	12.5
Number of students with complete data	1,356	53.6% <sup>2</sup>	1,445	53.6% <sup>2</sup>
Total RECAP students	2,531	-	2,694	-
Notes: <sup>1</sup> Signifies percentage of those with complete data <sup>2</sup> Signifies percentage of total students				

**Race/Ethnicity differences in analyzing time 1 risk statuses and COR change scores**

This year no differences due to race/ethnicity were found in this particular analysis for Black or Hispanic students. However, differences for white students were found to be significant this year at the multivariate level. At the individual COR subscale level, no differences by race/ethnicity were found this year.

For Black students: Wilks’ lambda =0.999, F(4,1432)=0.845, p>.05  
 For Hispanic students: Wilks’ lambda =0.996, F(4,1432)=1.312, p>.05  
 For White students: Wilks’ lambda =0.992, F(4,1432)=2.941, p<.05

Last year, based on the results from this one-way MANCOVA, students who had socio-emotional risks were not found to have a significantly different COR growth patterns based on race/ethnicity.

For Black students: Wilks’ lambda =0.997, F(3,1344)=1.837, p>.05  
 For Hispanic students: Wilks’ lambda =0.997, F(3,1344)=1.349, p>.05  
 For White students: Wilks’ lambda =0.998, F(3,1344)=0.891, p>.05



## **Gender differences**

This year, the gender of the students who had socio-emotional risks was found to have a significant association with COR growth at the multivariate level (Wilks' lambda =0.989,  $F(4,1432)=3.854$ ,  $p<.05$ ). This result was not true in last year's MANCOVA results: (Wilks' lambda =0.997,  $F(3,1344)=1.137$ ,  $p>.05$ ).

## **What do these results regarding socio-emotional risks and COR growth mean?**

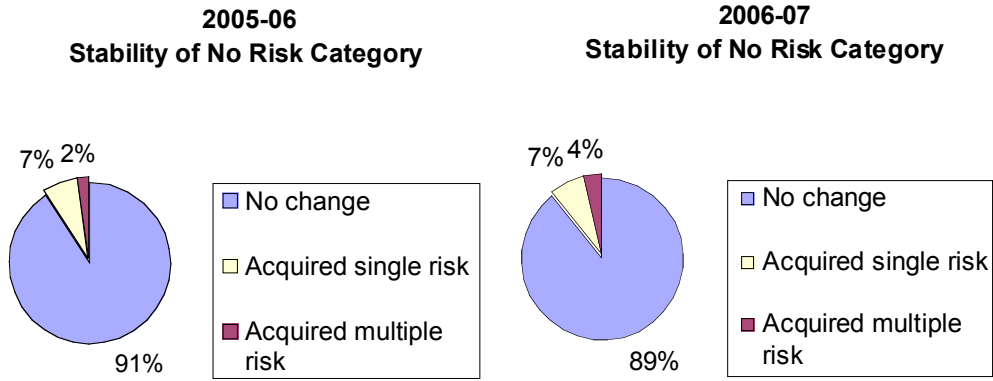
The initial socio-emotional risk status of students does not seem to impair the acquisition of skills as measured by the COR. Indeed, students with initial multiple risk factors in the socio-emotional domain acquired Initiative & Social and Movement & Music skills at the same rate as students who presented no risk initially in 2006-07.

Looking at this year's results in Figure II-10 and II-11 above, with a couple of exceptions, it appears that students who initially came to prekindergarten with lower skills and more risks gained as much as those students who did not have such risks.

Differences in the rate of growth by race/ethnicity were non-existent this year for this particular set of analyses. Differences were seen in multivariate tests for gender (Wilks' lambda =0.989,  $F(341432)=3.854$ ,  $p<.05$ ). Gender differences on the individual subscales were seen only in the Initiative & Social subscale ( $b=0.136$ ,  $t=3.491$ ,  $p<.05$ ) where boys were 0.136 little lower in growth.

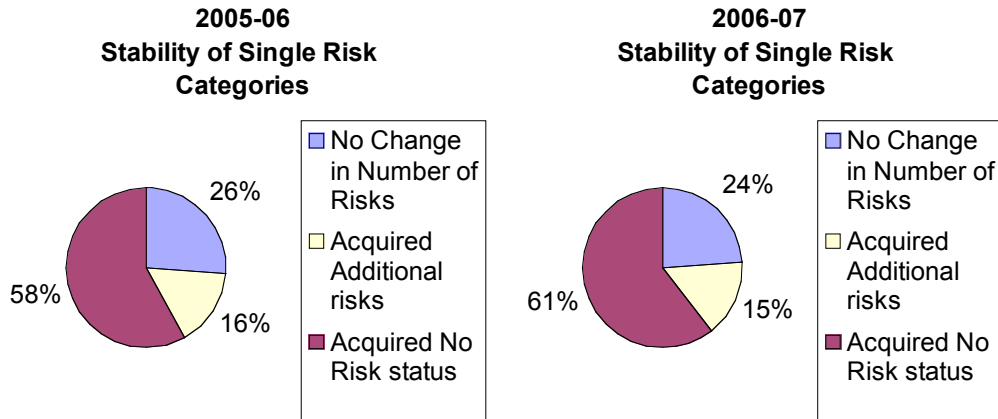
**How stable are these risk factors over the prekindergarten year?**

**Figure II-12 pie charts for the last 2 years, showing stability of socio-emotional risk factors: not at risk at time 1.**



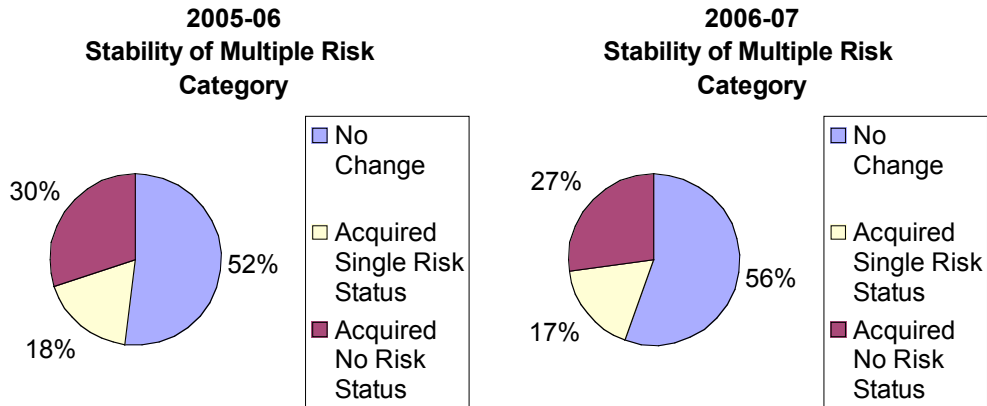
From Figure II-12 above, during 2006-07, 89% of students who were not initially at risk remained so at time 2, while 7% acquired one risk and 4% acquired multiple risks. There was an increase of those acquiring multiple risks compared to last year from 2% to 4%.

**Figure II-12 pie charts for the last 2 years, showing stability of socio-emotional risk factors: single risk factors at time 1.**



Looking at Figure II-12 above, during 2006-07, of the students who had a single socio-emotional risk status at time 1, 61% acquired no risk status by time 2, 25% had no change on the number of risks and 15% acquired additional risk factors. There was a 3% increase in the number of single risk students at time 1 who acquired no risk status this year compared to last year.

**Figure II-13 pie charts for the last 2 years, showing stability of socio-emotional risk factors: multiple risks at time 1.**



Looking at Figure II-13 above, in 2006-07, of the students that presented multiple socio-emotional risks at time 1, 56% still had multiple risks at time 2, 17% reduced the number of risks to a single risk, and 27% acquired no risk status by time 2, which means 44% of these students improved from where they started.

## Combining T-CRS Risks, COR Scores, and Demographics

An analysis was conducted again this year to examine the gender and race/ethnicity interactions in relation to COR performance and the number of the student's risk factors. For this analysis, regression was used. The dependent variable was the total COR scores. The categorical risk variable was an ordinal type risk variable that was the count of T-CRS risks identified (on a continuous scale of 0 risks to 4 risks). The independent variables used in the regression were: gender, White, Black, and Hispanic race/ethnicity. Another "Other" race/ethnicity classification was not used in this analysis, as it was small in number, and it is a non-homogeneous subgroup. The sample used was all 2006-07 RECAP children who had time 1 total COR scores and who fit into one of three race/ethnicity groups.

Last year's and this year's results from the regression analysis are displayed in graphical form in Figures II-15 through II-18 below. Data points shown in these figures are not actual data, but estimated values based on linear regression lines which were computed from the actual data. Although the lines are "smoothed," the results represent real phenomena.

The abbreviations used in Figures II-15 through II-18 include: for WF = white-female, WM = white-male, BF = Black-female, BM = Black-male, HF = Hispanic-female and HM = Hispanic-male.

The following summarizes findings from this analysis:

- Differences are influenced by both gender and race/ethnicity. Looking at Figure II-16 below, showing time 1 total COR scores for 2006-07, we once again found that the best performing group was the white female group. For comparison purposes, last year's results from this analysis are shown in Figure II-15 below. This year, all female subgroups were higher in performance at time 1 than the males of the same race/ethnicity. The lowest performing subgroups, both this year and last year, were the Black and Hispanic males. The largest differences, both this year and last year, in COR performance was between the white females and the Black males. This difference was about 0.4 in the mean COR score; or in terms of effect size equal to 0.5 (the standard deviation of COR scores is about 0.8).
- In general, as the number of T-CRS risks goes up, the COR scores go down. The COR scores generally decrease in relation to the number of T-CRS risks for race/ethnicity and gender combinations. This is true for each of the 4 COR subscales and COR total.
- Figure II-18 shows similar results for 2006-07 as in Figure II-16, but shows the COR scores in the post period. At time 2 we see the same gender and race/ethnicity patterns as at time 1. E.g., the white-female group outperformed all others, the Black and Hispanic males were the lowest performing groups, and all other groups fell in the middle. Figure II-17 displays 2005-06 for comparison purposes.

Figure II-15 2005-06 estimated conditional means time 1 COR scores

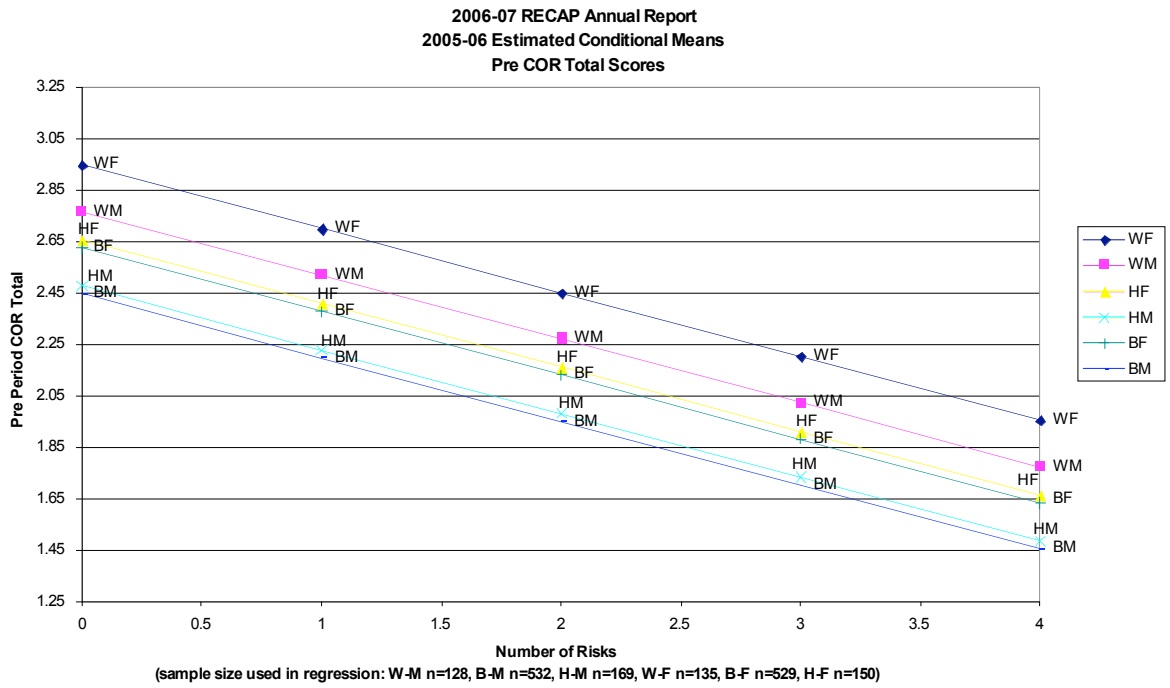
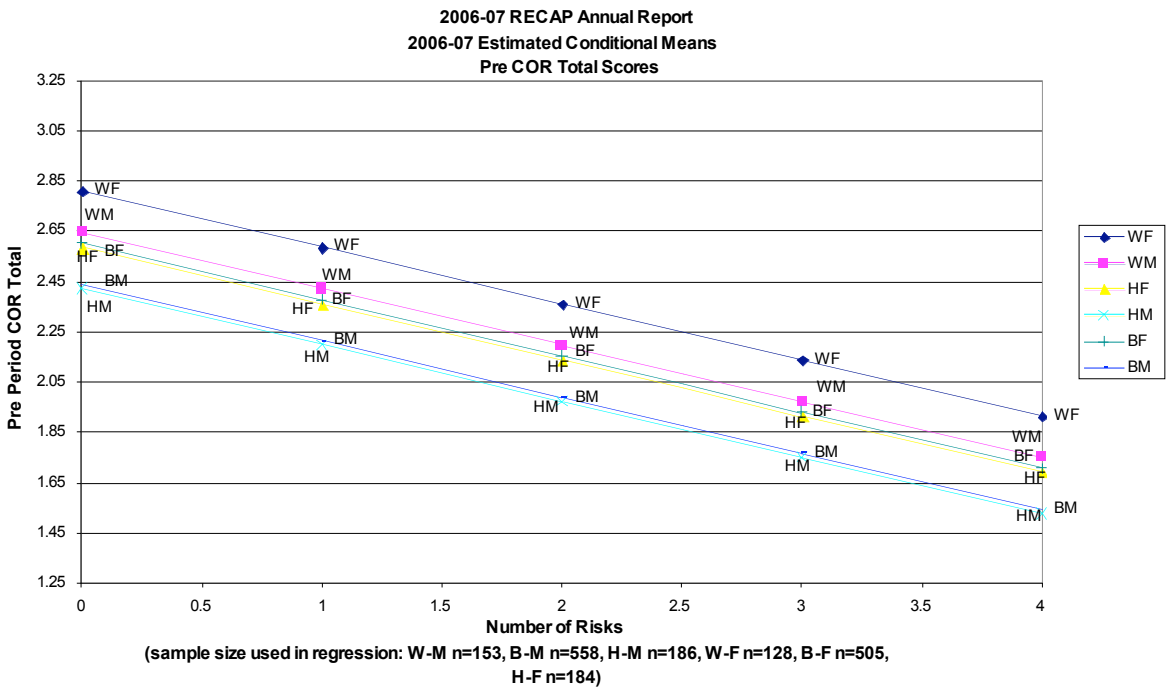
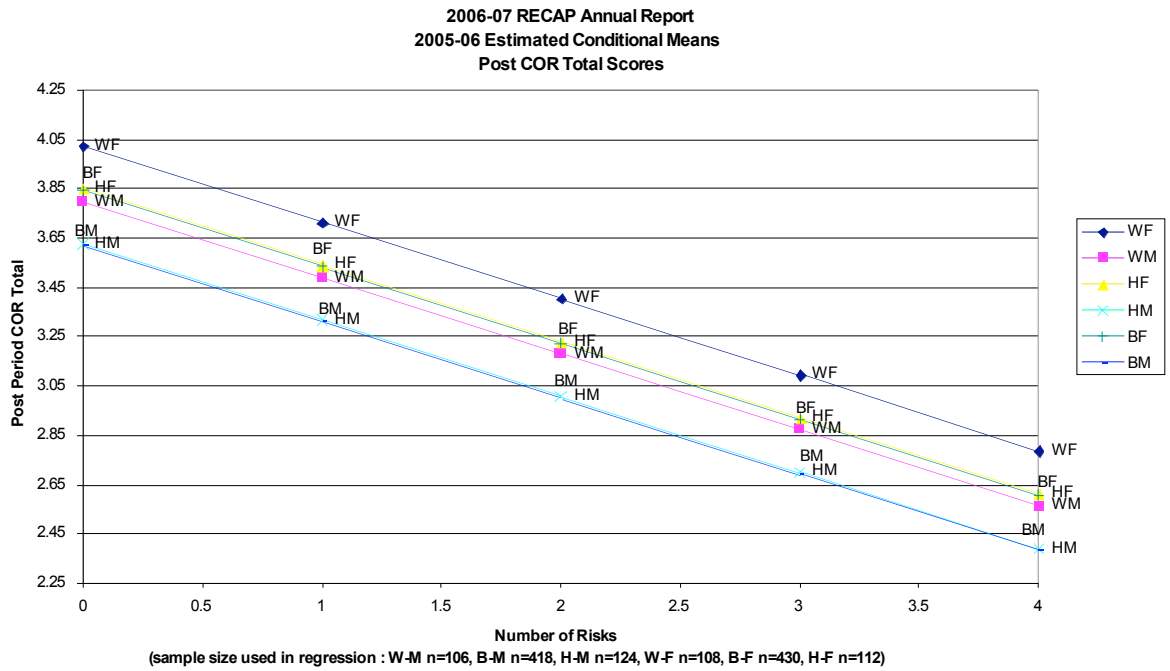


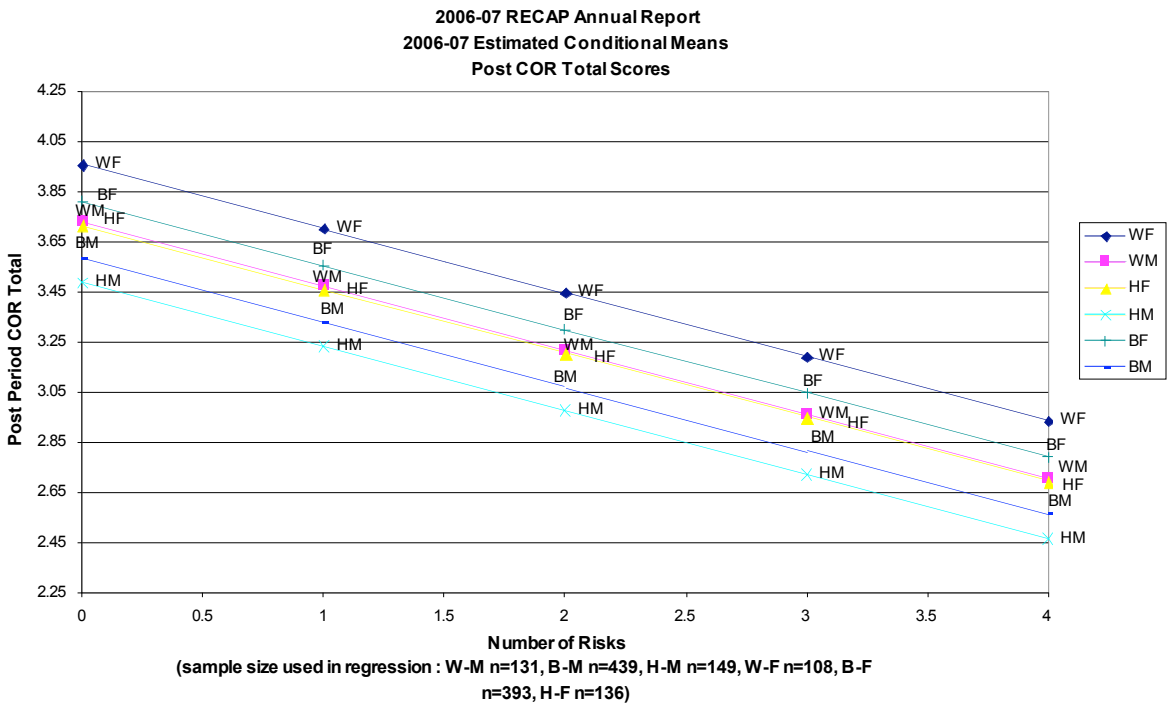
Figure II-16 2006-07 estimated conditional means time 1 COR scores



**Figure II-17 2005-06 estimated conditional means time 2 COR scores**



**Figure II-18 2006-07 estimated conditional means time 2 COR scores**



**What do these results from the analysis on T-CRS Risks, COR Scores, and Demographics mean?**

Students who arrive in the fall with multiple socio-emotional risk factors are likely to also arrive with lower levels of social, motor, literacy, and math skills. The larger the number of socio-emotional risks identified, the lower the level of social, motor, literacy, and math skills. These differences continue through the spring of the pre-k school-year.

Males and students of Black and Hispanic race/ethnicity have additional risk, which again supports previous studies and research.



### **Section 3 Child Demographics and COR & T-CRS Outcomes (New Analysis)**

**Purpose:** This year we have begun a series of additional significance tests that will be repeated in future years to better monitor and document any gender and/or Race/Ethnicity effects found in COR and T-CRS scores. In the past, from year to year we have observed demographic related effects that seem to appear and then disappear. It is possible that these effects (at sometimes weak levels of significance) are really just random year-to-year variation. However if these effects are real, they can only be verified over several years of repeated analyses.

**Method:** Multiple Analysis of Variance (MANOVA) tests were performed with the dependent variables being either the four COR or T-CRS subscales. The key independent variables were simply the gender and Race/Ethnicity of the student.

**Overall Results:** Tables II-11 through II-14 in the RECAP 2006-07 Statistical Supplement shows the complete MANOVA results from these tests for student demographic effects. What we found this year was that gender continues to be a significant factor in both COR and T-CRS scores. Girls continue to outperform boys. The Race/Ethnicity results are less definitive. It looks like white students had slightly higher Language & Literacy and Math & Science scores in the fall and slightly higher Language & Literacy scores in the spring COR when compared to both Black and Hispanic students. The Race/Ethnicity effects seen in T-CRS scores this year were inconclusive.

## **Section 4 Outcomes for Children in RECAP for 2 Years (New Analysis)**

**Purpose:** A new analysis was performed this year for the purpose of comparing 2006-07 Pre-K COR and T-CRS scores of children who participated in RECAP programs as a 3-year-old and again as a 4-year-old with those children who only participated in a RECAP program as a 4-year-old. This comparison only included children who were 4 years old in the 2006-07 RECAP programs.

**Method:** Multiple Analysis of Variance (MANOVA) tests were performed with the dependent variables being either the four COR or four T-CRS subscales. The key independent variables were the “2nd year in RECAP indicator,” gender and Race/Ethnicity of the student.

**Summary of COR Results:** Table II-15 in the **RECAP 2006-07 Statistical Supplement** shows the complete MANOVA results from these tests. We found that children who participated in RECAP programs as 3-year-olds and again as 4-year-olds outperformed children who only participated in a RECAP program only as a 4-year-old. This was true for all 4 fall COR subscales. The children in their second year of RECAP also outperformed the comparison group in the overall spring COR scores and in 2 out of the 4 spring COR subscales (movement & music and math & science were not significantly different in spring). The comparison group, however, did catch up to some degree, as they had higher fall to spring change scores in 3 out of the 4 COR subscales. Please see Table II-15 in the **RECAP 2006-07 Statistical Supplement** for more detail.

**Summary of T-CRS Results:** Table II-16 in the **RECAP 2006-07 Statistical Supplement** shows the complete MANOVA results from these tests. For the T-CRS scores, we found that children who participated in RECAP programs as 3-year-olds and again as 4-year-olds performed about the same as children who only participated in a RECAP program as 4-year-olds. Please see Table II-16 in the **RECAP 2006-07 Statistical Supplement** for more detail.

### **III. Parent Perspectives**

#### **Early Childhood Parent Survey (ECPS) – Parent Satisfaction**

The Early Childhood Parent Survey (ECPS) measures parent satisfaction in seven areas of early childhood programs:

- Parent needs, communication, and involvement
- Students needs and involvement
- Learning environment
- Teachers
- Administration
- Building, room, and equipment

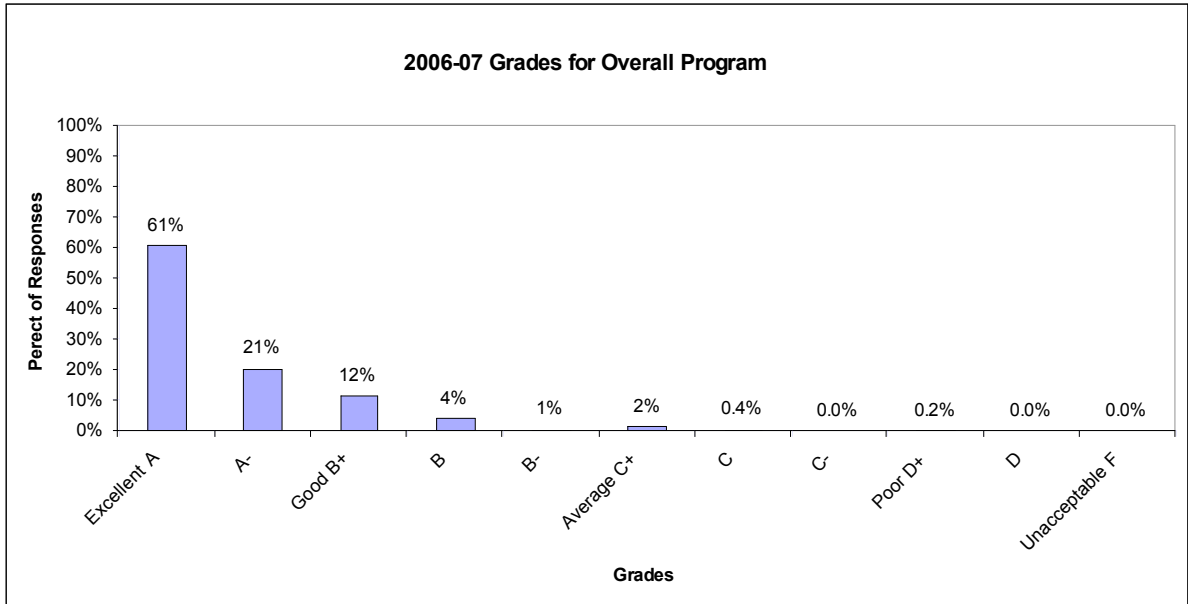
#### **How are these areas measured?**

To measure each area, parents were provided a list of 8 to 14 activities, routines or physical structures that they observed or experienced in the classroom or when dealing with the teachers and administrators. The responses are either “Yes” or “No” that the item was observed or not observed, respectively. At the end of each area, parents are also asked to assign an overall satisfaction grade (A – F) for that area.

#### **Overall, were parents satisfied with the prekindergarten education services that their students received?**

Yes. Parents indicated that they were highly satisfied with the early education services their child had received. Figure III-1 below shows the grades for all programs combined.

Figure III-1 parent satisfaction for all programs combined.

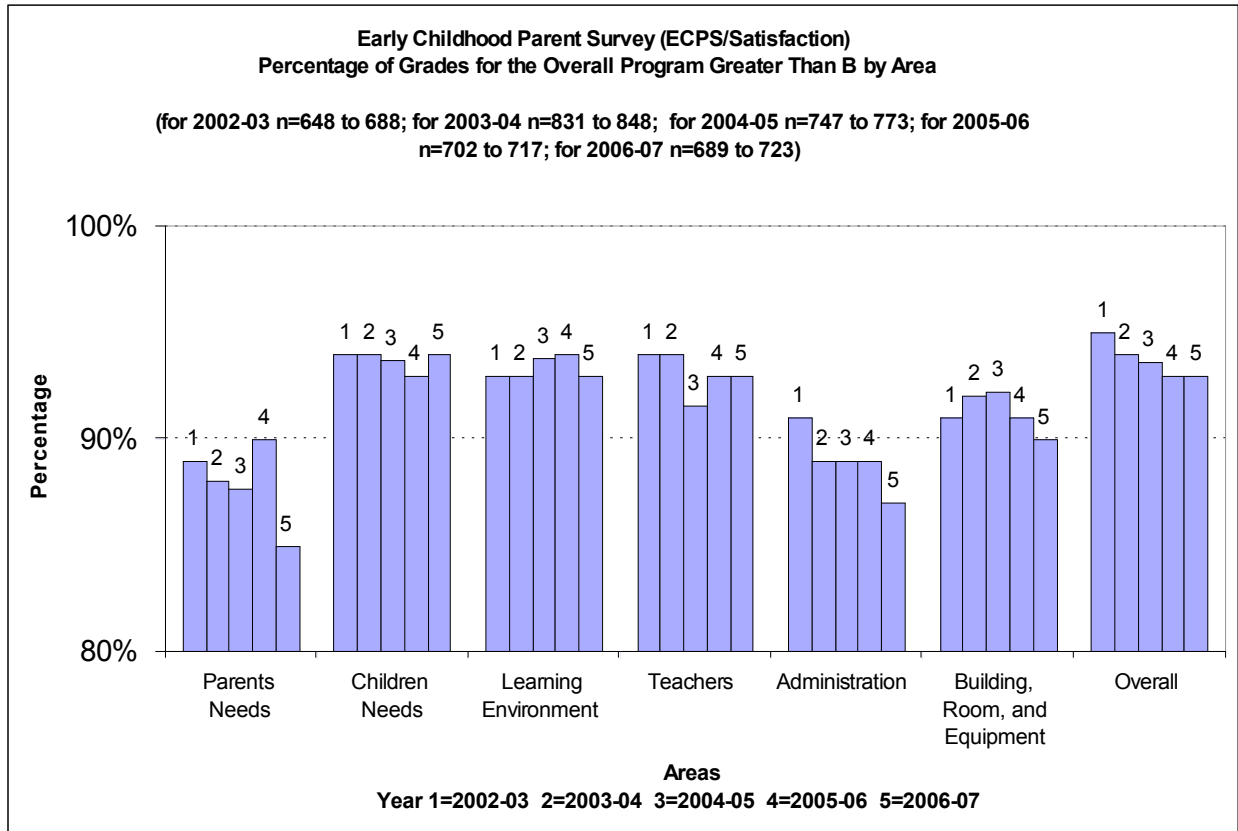


Grades for Overall Program Last 5 Years											
	Excellent A	A-	Good B+	B	B-	Average C+	C	C-	Poor D+	D	Unacceptable F
2002-03	61%	19%	15%	3%	1%	1%	0.3%	0.1%	0.1%	0.0%	0.1%
2003-04	64%	18%	11%	4%	1%	1%	0.8%	0.4%	0.1%	0.0%	0.0%
2004-05	67%	16%	11%	4%	1%	1%	0.5%	0.0%	0.0%	0.0%	0.0%
2005-06	62%	18%	13%	3%	2%	1%	0.1%	0.1%	0.0%	0.0%	0.0%
2006-07	61%	21%	12%	4%	1%	2%	0.4%	0.0%	0.2%	0.0%	0.0%

**When comparing results across recent years are there any noticeable trends?**

The satisfaction results for this year parallel those of previous years. Overall, parents remain very satisfied with their children’s prekindergarten programs. This year 94% rated the programs above a “B” (good). This percentage was 93% last year.

**Figure III-2 parent satisfaction by area.**

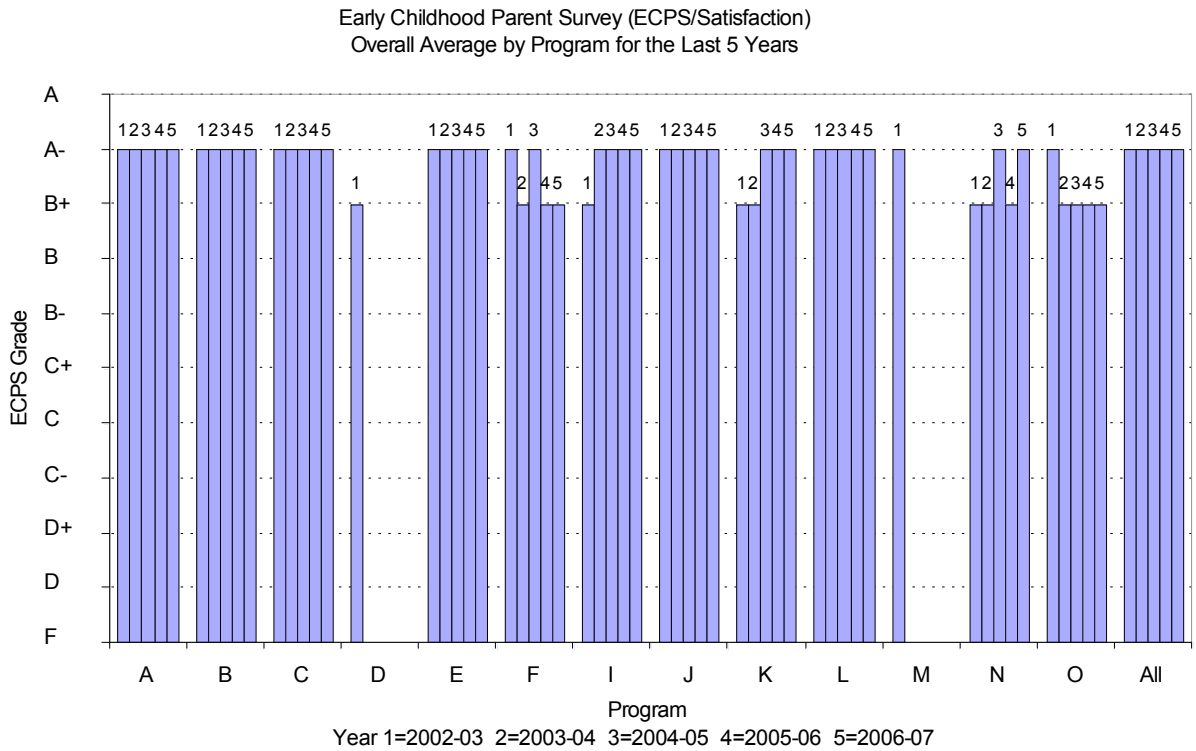


Early Childhood Parent Survey (ECPS/Satisfaction)								
Percentage of Grades for the Overall Program Greater Than B by Area								
School Year	Year	Parents Needs	Children Needs	Learning Environment	Teachers	Administration	Building, Room, and Equipment	Overall
2002-03	1	89%	94%	93%	94%	91%	91%	95%
2003-04	2	88%	94%	93%	94%	89%	92%	94%
2004-05	3	88%	94%	94%	92%	89%	92%	94%
2005-06	4	90%	93%	94%	93%	89%	91%	93%
2006-07	5	85%	94%	93%	93%	87%	90%	93%

**Was there variation in parent satisfaction by program?**

Yes. There is some variation across programs; yet as can be seen in Figure III-3 below, all programs scored a B or above, for each of the last five years.

**Figure III-3 average parent satisfaction levels by program for last 5 years.**



Overall Average by Program for the Last 5 Years															
School Year	Year	Program													
		A	B	C	D	E	F	I	J	K	L	M	N	O	All
2002-03	1	A-	A-	A-	B+	A-	A-	B+	A-	B+	A-	A-	B+	A-	A-
2003-04	2	A-	A-	A-	.	A-	B+	A-	A-	B+	A-	.	B+	B+	A-
2004-05	3	A-	A-	A-	.	A-	A-	A-	A-	A-	A-	.	A-	B+	A-
2005-06	4	A-	A-	A-	.	A-	B+	A-	A-	A-	A-	.	B+	B+	A-
2006-07	5	A-	A-	A-	.	A-	B+	A-	A-	A-	A-	.	A-	B+	A-

Please note: The average parent satisfaction levels for a program can only be a full “A” if 100% of the parents responding assign an “A.” Otherwise, there is a rounding down in displaying the averages.

**For a more complete examination of the satisfaction data please consult Appendix B and D in the RECAP 2006-07 Annual Report Statistical Supplement.**

Appendix B in the supplement contains tables and graphs describing satisfaction rates for each item and program. Overall, parents are highly satisfied with the formal early childhood programs their children attend.

## **Family Involvement Questionnaire (FIQ - New Analysis)**

### **Purpose**

The purpose of this section of the report is to highlight some recent observations that have been made from use of the Family Involvement Questionnaire (FIQ). We collected and used data from this measure for the first time this year in RECAP.

### **FIQ Description**

The Family Involvement Questionnaire (FIQ) was developed to look at the many ways parents support their children's education. It has been suggested often that children do better when their parents are more involved.

There are three areas of parent involvement assessed by the FIQ:

1. **Parent Involvement in the School.** This area is defined by activities and behaviors parents engage in at schools/centers with their children, such as volunteering in the classroom, going on class trips, and meeting with other parents in or out of school to plan events or fundraisers.
2. **Parent Involvement at Home.** This area includes behaviors describing the active promotion of a learning environment at home for children, such as providing a place in the home for learning materials and creating learning experiences in the community.
3. **Parent-Teacher Communication.** This area describes communication between parents and school/center personnel about a child's educational experience and progress, including talking with the teacher about a child's difficulties or accomplishments at school and educational activities to practice at home.

The Family Involvement Questionnaire was developed by Perry, Fantuzzo, and Munis, University of Pennsylvania, Graduate School of Education, 2002.

### **Overview of Results**

The first year FIQ results for RECAP showed that the prevalent parent involvement type for Rochester pre-k parents was “Parent Involvement at Home,” followed by “Parent-Teacher Communication,” and then “Parent Involvement in the School” with the lowest level of participation.

Several analyses were completed this year on recent FIQ results. The FIQ results by program and for all programs combined, clearly shows that parents report that they are most involved with their children at home. While some programs have higher school involvement than others, home involvement is the most prevalent factor across all programs.



## Results

Table III-1 below shows the results for all 42 items on the measure, for all programs combined and for all parents who responded. The table is sorted in descending order of the mean response.

Looking at Table III-1 the highest mean response for an item was 3.67 out of a possible 4.00 for the item: "I maintain clear rules at home that my child should obey." The second highest response was for the item: "I review my child's school work." The lowest mean response was 1.35 out of 4.00 for: "I meet with other parents from my child's classroom outside of school."



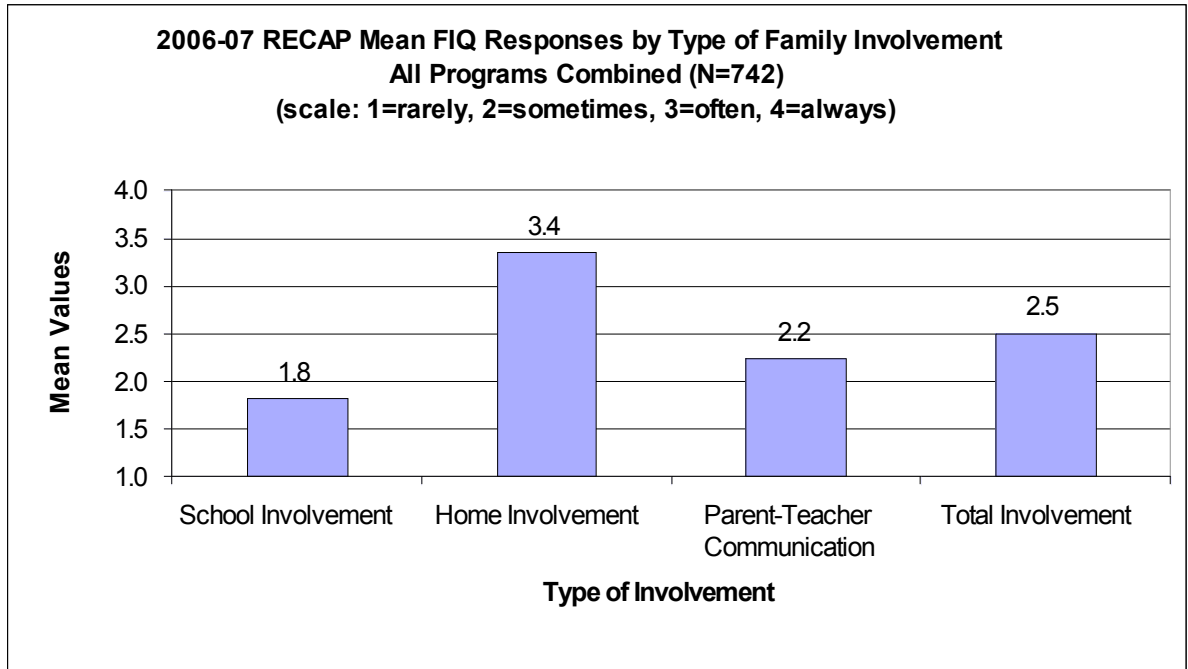
**Table III-1**

<b>2006-07 RECAP FIQ Results - All 42 Questions</b>			
<b>Sorted in Descending Order of the Mean Response</b>			
<b>(range: 1=rarely, 2=sometimes, 3=often, 4=always)</b>			
<b>All 42 FIQ Questions - All Programs, All Parents Responding</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>
29. I maintain clear rules at home that my child should obey	721	3.67	0.60
5. I review my child's school work	722	3.61	0.68
18. I check to see that my child has a place at home where books or school materials are kept	733	3.57	0.70
11. I keep a regular morning and bedtime schedule for my child	733	3.56	0.70
41. I spend time with my child working on creative activities (like singing, dancing, drawing)	725	3.50	0.68
39. I feel that teachers/administrators welcome and encourage parents to be involved at school	717	3.41	0.80
42. I spend time with my child working on number skills	727	3.40	0.73
24. I talk with my child about how much I love learning new things	724	3.32	0.81
31. I spend time with my child working on reading/writing skills	717	3.31	0.74
23. I talk about my child's learning efforts in front of relatives and friends	718	3.29	0.90
25. I bring home learning materials for my child (tapes, videos, books)	722	3.26	0.83
12. I praise my child for his/her school work in front of the teacher	726	3.09	1.04
14. I take my child places in the community to learn special things (e.g. zoo, museum, etc.)	737	3.08	0.91
4. I limit my child's TV and video watching	736	2.96	0.86
10. I take my child to school in the morning	728	2.94	1.23
34. I pick my child up from school in the afternoon	718	2.93	1.20
13. I share stories with my child about when I was in school	733	2.92	1.02
3. I talk to my child's teacher about his/her daily school routine	733	2.78	0.99
30. I talk to my child's teacher about his/her difficulties at school.	719	2.71	1.04
22. I talk to my child's teacher about my child's accomplishments	721	2.69	0.92
1. I attend conferences with the teacher to talk about my child's learning or behavior	726	2.63	1.11
40. I feel that parents in my child's classroom support each other	696	2.62	1.08
17. I talk to the teacher about how my child gets along with his/her classmates in school	734	2.57	0.94
28. I hear teachers tell my child how much they love learning	708	2.51	1.10
36. I talk with my child's teacher about school work he/she is expected to practice at home	712	2.28	1.03
9. I talk to my child's teacher about the classroom rules	727	2.20	1.01
6. I take my child to the public library	733	2.20	1.00
27. I participate in parent and family social activities at my child's school	709	2.06	1.04
26. I go on class trips with my child	710	2.01	1.15
2. I schedule meetings with administrators to talk about problems or to gain information	718	1.76	0.97
20. I participate in fundraising activities at my child's school	699	1.75	1.01
33. I talk with other parents about school meetings and events	706	1.66	0.92
8. I attend parent workshops or trainings offered by my child's school	718	1.65	0.93
19. I volunteer in my child's classroom	715	1.64	0.90
15. I talk with my child's teacher on the telephone	706	1.63	0.84
37. I talk with my child's teacher about our personal and family matter	694	1.62	0.89
21. The teacher and I write notes to each other about my child or school activities	712	1.59	0.87
32. I arrange times at home when my child's classmates can come and play	707	1.54	0.89
16. I participate in planning school trips for my child	720	1.50	0.84
35. I talk with people at my child's school about my training/career development opportunities	705	1.48	0.84
7. I participate in planning classroom activities with the teacher	719	1.47	0.80
38. I meet with other parents from my child's classroom outside of school	696	1.35	0.70

Figure III-1 below shows the results for this year for all programs combined. The highest score for a factor was Home Involvement.



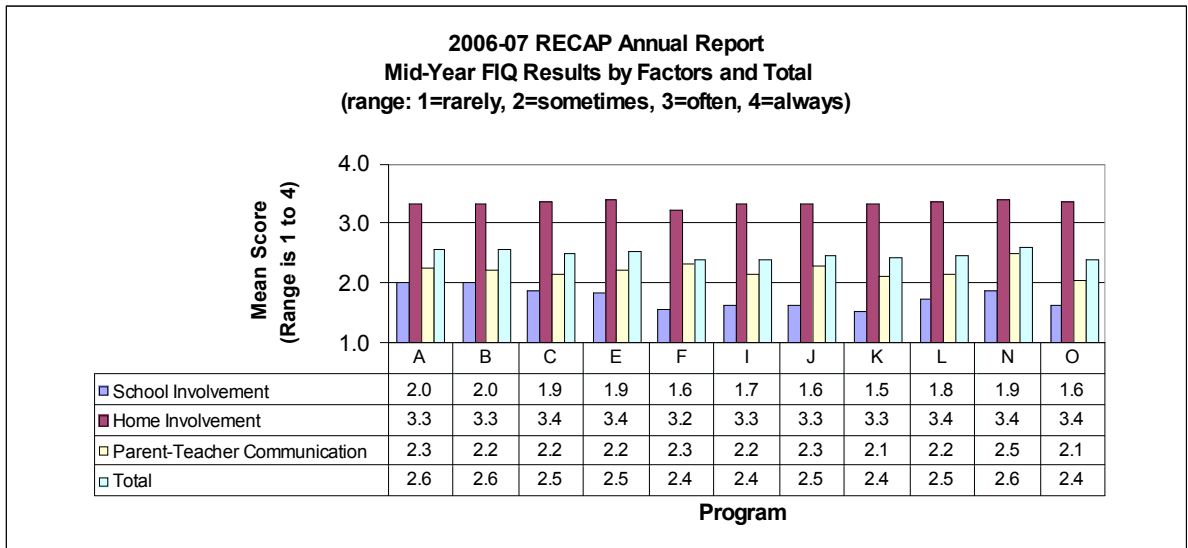
**Figure III-1 RECAP Mean FIQ Responses by Type of Family Involvement**



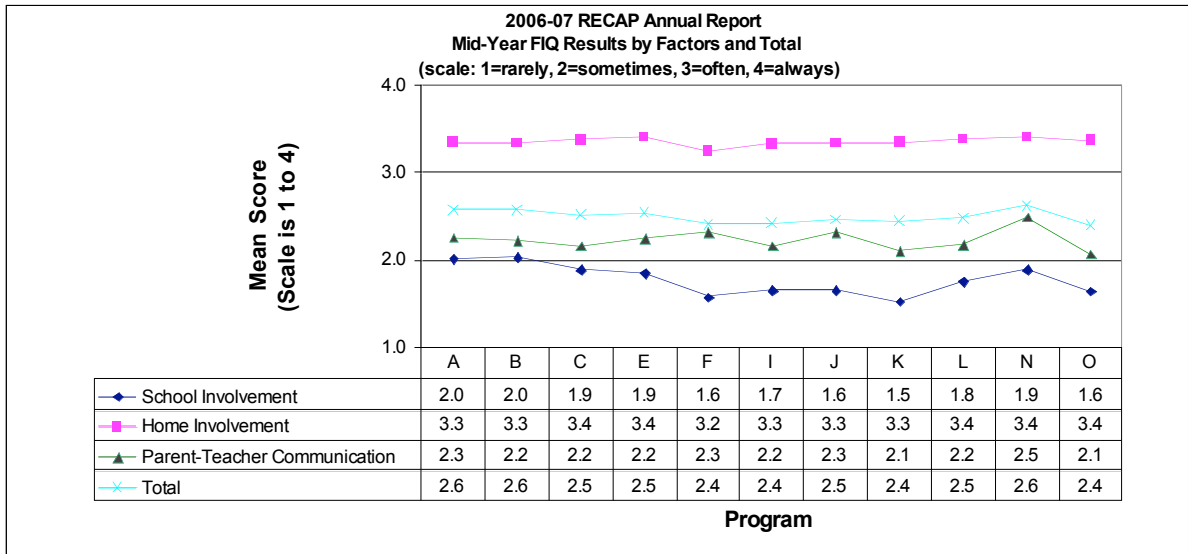
**FIQ Results by Program**

Figures III-2 and III-3 below show FIQ mean score results by program.

**Figure III-2**



**Figure III-3**



**Factor Analysis results**

Multiple factor analyses were performed on the 2006-07 RECAP FIQ results. Those analyses found that there were 3 constructs underlying the data which were very similar to the 3 constructs identified in earlier studies. These constructs again included: Parent Involvement in the School, Parent Involvement at Home, and Parent-Teacher Communication.

**A more in depth report on this factor analysis can be found in Appendix III of the RECAP 2006-07 Annual Report Statistical Supplement.**

## IV. Family Childcare

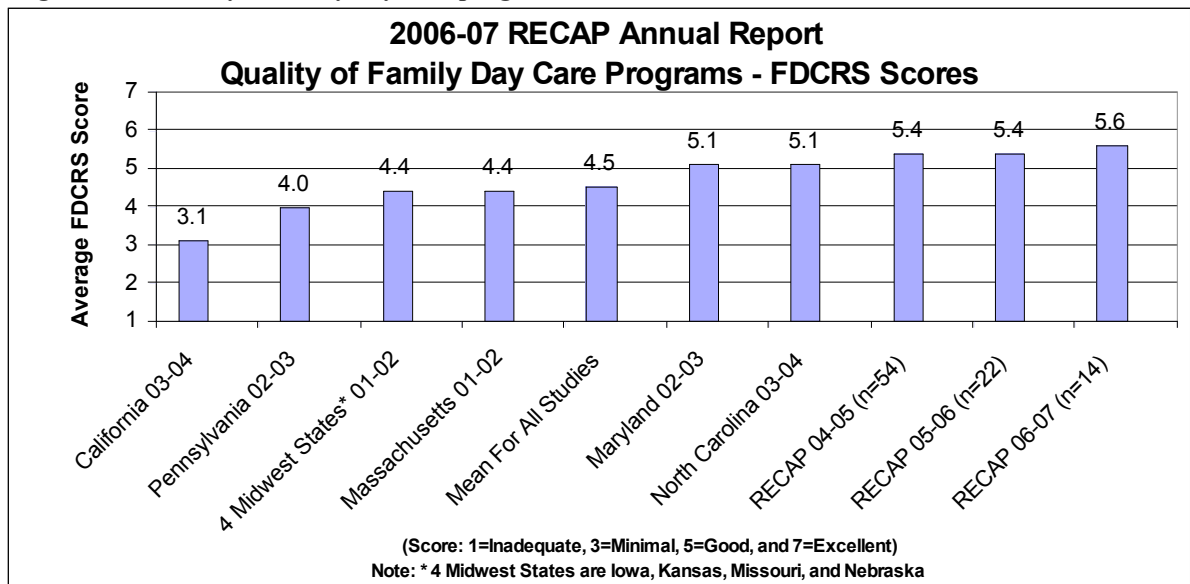
We continued to include family childcare providers in RECAP for a third year. In addition to the benefits it brings providers, assessment of family childcare is motivated by community investment and the enthusiastic interest of our partners. This year, 14 family childcare providers participated in RECAP, which is a decrease in participation from 22 last year. This decrease is for a variety of reasons including the fact that nine providers closed their programs. Efforts are underway to increase the number of participating providers in 2007-08.

Collaboration with Rochester Childfirst Network Family Child Care Satellites of Greater Rochester (FCCSGR) enables RECAP to welcome family childcare providers into our partnership in a meaningful way. We are grateful to FCCSGR's uniquely qualified professionals, resources and programs that have facilitated our partnership with family childcare providers.

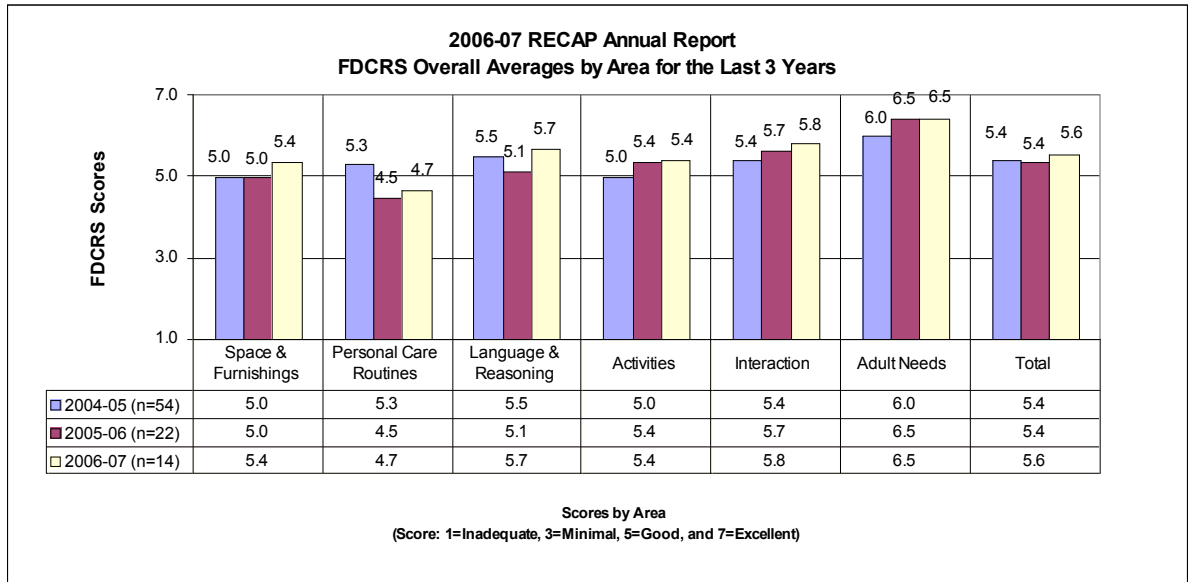
The model we have developed for family childcare assessment contains one main component: program quality assessment using the Family Day Care Rating Scale (FDCRS) (Harms & Clifford, 1989).

The RECAP family day care programs continued to maintain a high level of quality. The mean total FDCRS score this year was 5.6 (n=14) which can be categorized as "Good." The standard deviation was 0.9 and the median total score was 5.8. Figure IV-1 below shows that the 5.6 mean score compares quite favorably with a sample of other programs.

Figure IV-1 Quality of family day care programs



**Figure IV-2 FDCRS area scores are shown for the last 3 years.**



**What is the reliability of the FDCRS?**

This year 3 programs were observed by two observers so that the level of agreement between different observers could be assessed.

Table IV-1 below shows the results of the reliability calculations for the last 3 years of FDCRS observations. The internal reliability (Cronbach’s Alpha) of the FDCRS this year was 0.91. The inter-rater reliability was  $r = 0.91$  (n=3 dual observations). Using (a/a+d; a=agreement and d=disagreement) the median inter-rater reliability was 0.88 for exact matches and 0.97 for differences of one point.

**Family Child Care Parent Survey (New Survey)**

Provider interest in measuring parent satisfaction led to the development and distribution of a new Family Child Care Parent Survey this year. Thirty-nine surveys were completed and returned. A report was prepared showing a summary of the results from this survey which was forwarded to the providers. Feedback on program strengths and opportunities for improvement was based on actual parent responses to this survey.

**Table IV-1 reliability of the FDCRS.**

<b>Table IV-1</b>			
<b>2006-07 RECAP Annual Report</b>			
<b>FDCRS Reliability for the Last 3 Years</b>			
	<b>School-Year</b>		
	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>
<b>Internal Reliability</b>			
Sample Size	54	22	14
Cronbach's Alpha Value	0.94	0.89	0.91
<b>Inter-Rater Reliability</b>			
Sample size	11	8	3
Median Inter-Rater Reliability for Exact Matches	0.63	0.84	0.88
Median Inter-Rater Reliability for Differences of One Point Matches	0.77	0.94	0.97
Total FDCRS Inter-Rater Reliability (r)	0.83	0.95	0.91
Space & Furnishings (r)	0.27*	0.87	0.82
Personal Care Routines (r)	0.80	0.99	0.87
Language & Reasoning (r)	0.87	0.88	0.94
Activities (r)	0.97	0.96	1.00
Interaction (r)	0.51*	0.94	0.98
Adult Needs (r)	0.76	0.95	1.00
Notes: * All inter-rater reliability values were significant at $Pr(t) \leq .01$ except for the Space & Furnishings and Interaction areas in 2004-05. (r) Denotes Pearson Correlation Coefficient shown.			

It is important to note that there was a significant increase in inter-rater reliability among the FDCRS Master Observers beginning in 2005-06. This was in part due to the improved quality of the training program implementation and Master Observers' improvement in observation skills and adherence to scoring protocol.

## **V. Follow-up Studies**

### **Follow-up Analysis of RECAP Students**

#### **Purpose of Analysis**

The analysis was done to compare the 2006-07 kindergarten performance of students who participated in the 2005-06 RECAP prekindergarten programs with those students who did not participate in the RECAP programs. The comparison was made using 2006-07 RCSD kindergarten COR scores. This is the fourth consecutive year of this analysis.

#### **Summary of Results**

The findings from this analysis are that for the overall 2005-06 RECAP student population, the RECAP students had significant, slightly higher 2006-07 fall kindergarten COR scores than non-RECAP students. Moreover, in the spring of 2006-07 this positive effect continued to be present. *This means that the RECAP students started slightly higher and also ended slightly higher in the spring.* This result has now been replicated for the past 4 years.

#### **Sample**

All students with 2006-07 RCSD Fall kindergarten COR scores were included in the sample. To determine whether these students had attended RECAP centers the 2005-06 RECAP data was used.

#### **Attrition of Subjects**

Attrition occurs when there is initial data for a subject, but no follow up data. Reasons for attrition in this particular study might include RECAP students attending non-RCSD kindergarten classes or students remaining out of kindergarten for an additional year.

The RCSD ID numbers either did not exist or were not known for 26% of the RECAP students. Overall, we had an attrition rate of 56% for the 2005-06 RECAP students. This means that, at most, our follow-up study this year could only track 44% of the 2005-06 RECAP students.

Table V-1 below shows the attrition rates for the last four years (for comparison purposes) in tracking our RECAP students in kindergarten. The attrition rates are the percentage of RECAP students that we cannot account for when conducting this type of follow-up analysis.

**Table V-1 Attrition rates for RECAP follow-up subjects.**

<b>Table V-1</b>				
<b>Attrition for the Last Three Years in RECAP Follow-up Subjects</b>				
	<b>RECAP Cohort</b>			
	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>
Total RECAP students	2,649	2,887	2,790	2,531
#RECAP students identified in kindergarten in the following school-year.	1,263	1,229	1,275	1,109
#RECAP students <i>not</i> identified in kindergarten in the following school-year.	1,386	1,658	1,515	1,422
Attrition Rate	52%	57%	54%	56%

### **The COR Versions Used in this Analysis**

For the past 2 years, we have been transitioning to the latest version of the COR for both pre-k and kindergarten. Because of this transition period, a brief description of the different COR versions and how we used them is available in Chapter II of this report: “Children’s Outcomes – Section 1 COR – Student Performance.” Please refer to this chapter for a full understanding of which version of COR and which COR subscales were being used for each RECAP year.

However, to summarize, all pre-k COR outcomes reported for 2004-05 and 2005-06 in this year’s “follow-up analysis of RECAP students” are based on using the latest COR32 measure and approximating the 3 subscales that were developed with the earlier COR30 version of the measure. All pre-k outcomes reported for this year are based on using a reduced subset of 23 items from the new 32-item COR and 4 new subscales.

All kindergarten COR outcomes shown in this analysis that are from years prior to 2006-07 were based on a reduced subset of 21 items from the COR30 and 3 subscales that were developed with the earlier COR30. All kindergarten outcomes reported for this year are based on the new 32-item COR and 4 new subscales.

### **General Analyses**

The following analyses were performed using both Multivariate Analysis of Variance (MANOVA) and Analysis of Variance (ANOVA) to see if there were differences in





kindergarten COR scores between the group of students who had RECAP experience in 2005-06 and the group that was not in RECAP.

The main purpose of this report is to identify effects that are RECAP based. While other effects such as gender, race/ethnicity were examined and reported on to some degree, it is the RECAP variable, or possibly an interaction using this variable, that is the main focus here.

### **Fall Kindergarten COR Subscales**

The first MANOVA conducted used the fall 2006-07 kindergarten COR initiative-social, movement-music, language-literacy, and math-science subscales as the dependent variables. The independent variables used were RECAP experience, gender and race/ethnicity. The .05 level was used to establish significance for all tests in this analysis. Race/ethnicity was defined as white, Black, or Hispanic. The “Other” race/ethnicity classification was not used, as it was small in number, and it is a non-homogeneous group.

**RECAP effect:** The result from the fall MANOVA showed that overall differences in kindergarten COR scores were due, in part, to a main effect of RECAP experience. This effect was found to be significant overall (Wilks’ lambda = 0.982,  $F(4,2015) = 9.22$ ,  $p < .05$ ). In addition, in univariate tests, all 4 COR subscales proved to be significant (initiative-social  $F(1,2018)=17.96$ ,  $p < .05$ ; math-science  $F(1, 2018)=27.23$ ,  $p < .05$ ; language-literacy  $F(1, 2018)=32.1$ , and movement-music  $F(1, 2018)=9.46$ ,  $p < .05$ ). Students with RECAP experience had higher fall COR scores than non-RECAP students.

**Gender & race/ethnicity:** In addition to the main effect for the RECAP indicator, gender and race/ethnicity were also found to have significant effects. As in last year’s follow-up analysis, in the multivariate test, gender was found to have a significant effect upon fall COR scores (Wilks’ lambda = 0.982,  $F(4,2015) = 9.35$ ,  $p < .05$ ). In the univariate tests, all 4 COR subscales proved to be significant (initiative-social  $F(1,2018)=28.78$ ,  $p < .05$ ; math-science  $F(1, 2018)=7.40$ ,  $p < .05$ ; language-literacy  $F(1, 2018)=14.68$ , and movement-music  $F(1, 2018)=19.01$ ,  $p < .05$ ). According to pairwise comparisons, girls had higher time 1 COR scores than boys in all 4 subscales.

In the multivariate test, race/ethnicity was found to have a significant effect on fall COR scores (Wilks’ lambda = 0.965,  $F(8,4030) = 8.93$ ,  $p < .05$ ). In the univariate tests, 3 out of 4 COR subscales proved to be significant (initiative-social  $F(1,2018)=11.04$ ,  $p < .05$ ; math-science  $F(1, 2018)=16.33$ ,  $p < .05$ ; language-literacy  $F(1, 2018)=17.93$ , and movement-music  $F(1, 2018)=1.85$ ,  $p < .05$ ). According to pairwise comparisons, white students had higher initiative-social, math-science, and language-literacy scores than both Black & Hispanic students. For movement-music there were no significant differences by race/ethnicity. These results for the race/ethnicity effect were the same as in last year’s results.

**Higher Order Interactions:** The presence of consistent, significant higher order RECAP/non-RECAP related effects would be confirmation that not all RECAP students are benefiting equally from their RECAP experience. In general, over the last 4 years, we have not seen any *consistent* results that confirm higher order effects. Over this time, findings that have appeared, and then not-appeared from year to year, and are as yet non-conclusive. In 2006-07 none of the higher order interactions were found to be significant.

The RECAP \* gender interaction was not significant (Wilks' lambda = 0.997,  $F(4,2015) = 1.52$ ,  $p > .05$ ), the RECAP \* race/ethnicity interaction was not significant (Wilks' lambda = 0.995,  $F(8,4030) = 1.34$ ,  $p > .05$ ), and also the RECAP \* gender \* race/ethnicity interaction was not significant (Wilks' lambda = 0.997,  $F(6,3978) = 1.00$ ,  $p > .05$ ).

### **Fall Kindergarten Total COR**

For the purpose of brevity throughout this report, kindergarten COR totals and not the subscales are graphically displayed if the total and subscale MANOVA results are consistent with each other. To better focus on the fall kindergarten COR total as a dependent variable, an Analysis of Variance (ANOVA) was conducted using kindergarten COR total as the dependent variable.

The results of this ANOVA were consistent with the kindergarten fall COR MANOVA described earlier. That is, the main effect of RECAP experience was significant ( $F(1,2026)=25.42$ ,  $p < .05$ ). Students with RECAP experience had higher fall COR scores than non-RECAP students.

Gender & race/ethnicity: The ANOVA results also showed that gender ( $F(1, 2026)=20.97$ ,  $p < .05$ ; and race/ethnicity ( $F(2, 2026) = 12.35$ ,  $p < .05$ ) were significant. The pairwise comparisons for these independent variables were the same as in the Fall MANOVA above. Girls had higher scores than boys and white students had higher scores than Black and Hispanic students.

For the higher order interactions:

RECAP \* gender was not significant ( $F(1, 2026)=0.07$ ,  $p > .05$ ).

RECAP \* race/ethnicity was not significant ( $F(2, 2026)=0.70$ ,  $p > .05$ ).

RECAP \* gender \* race/ethnicity was not significant ( $F(2, 2026)=0.02$ ,  $p > .05$ ).

### **Spring Kindergarten COR Subscales**

We next examined the effects of RECAP on spring kindergarten COR results. The MANOVA described earlier for the fall kindergarten COR scores was repeated using the spring 2006-07 kindergarten COR initiative-social, movement-music, language-literacy, and math-science subscales as the dependent variables.

The result from the spring MANOVA showed that differences in the kindergarten COR overall was due, in part, to a main effect of RECAP experience. This effect was found to be significant (Wilks' lambda = 0.986,  $F(4,2004) = 7.01$ ,  $p < .05$ ). Students with RECAP experience had higher spring COR scores than non-RECAP students. This result means that the "jump start" that RECAP students had in the fall of their kindergarten year was maintained and they still had an advantage in the spring of 2007. Upon checking each COR subscale on the univariate level, the RECAP effect on all 4 subscales was also significant in the spring (initiative-social  $F(1,2007)=15.70$ ,  $p < .05$ ; math-science  $F(1, 2007)=21.39$ ,  $p < .05$ ; language-literacy  $F(1, 2007)=27.33$ ,  $p < .05$ ; and movement-music  $F(1, 2007)=17.71$ ,  $p < .05$ ). We had these same findings last year, except that the motor subscale was not significant  $F(1, 1909)=0.12$ ,  $p > .05$ ) in 2005-06.

Gender & race/ethnicity: In addition to the main effect for the RECAP, gender and race/ethnicity were also found to be significant in the spring data. Gender was found to have a significant effect upon spring COR scores (Wilks' lambda = 0.979,  $F(4,2004) = 10.74$ ,  $p < .05$ ); Girls had higher spring COR scores than boys for all 4 subscales.

As in this year's fall MANOVA and in last year's analysis, race/ethnicity was again found to have a significant multivariate effect on spring COR scores (Wilks' lambda = 0.965,  $F(8,4008) = 8.89$ ,  $p < .05$ ). For the univariate tests, 3 of the 4 subscales were significant (initiative-social  $F(2,2007)=9.93$ ,  $p < .05$ ; math-science  $F(2, 2007)=9.75$ ,  $p < .05$ ; language-literacy  $F(2, 2007)=8.53$ ). Only the movement-music subscale did not prove to be significantly different by race/ethnicity ( $F(2,2007) = 1.44$ ,  $p > .05$ ).

Looking at the pairwise comparisons (SNK Groupings), white students were found to have significantly higher scores than Black and Hispanic students in the initiative-social and math-science skills. For language-literacy:  $W > B > H$ . There were no differences for race/ethnicity in the movement-music skills.

Just as in the fall MANOVA, there were not significant higher order interactions involving the RECAP/non-RECAP variable.

Interactions:

RECAP \* gender was not significant (Wilks' lambda = 0.999,  $F(4,2004) = 0.57$ ,  $p > .05$ ).

RECAP \* race/ethnicity was not significant (Wilks' lambda = 0.997,  $F(8,4008) = 0.79$ ,  $p > .05$ ).

RECAP \* gender \* race/ethnicity was not significant (Wilks' lambda = 0.998,  $F(8,3800) = 0.56$ ,  $p > .05$ ).

### **Spring Kindergarten Total COR**

An Analysis of Variance was also performed using the spring COR total. The results of this ANOVA were consistent with the spring MANOVA. That is, the main effect of RECAP

experience was significant ( $F(1,2017)=22.49, p<.05$ ). Students with RECAP experience had higher spring COR scores than non-RECAP students.

Gender & race/ethnicity: The ANOVA results also showed that gender ( $F(1, 2017)=22.49, p<.05$ ; and race/ethnicity ( $F(2, 2017) = 25.63, p<.05$ ) were significant. The pairwise comparisons for these independent variables were similar to the spring MANOVA results above. Girls had higher scores than boys and white students had higher scores than Black and Hispanic students.

There were not significant higher order interactions involving the RECAP/non-RECAP variable.

For the higher order interactions:

RECAP \* gender was not significant ( $F(1, 2017)=2.87, p>.05$ ).

RECAP \* race/ethnicity was not significant ( $F(2, 2017)=0.86, p>.05$ ).

RECAP \* gender \* race/ethnicity was not significant ( $F(2, 2017)=2.01, p>.05$ ).

Figure V-1 below shows the differences between RECAP students and non-RECAP students in the fall and spring.

**Figure V-1 2006-07 kindergarten COR marginal mean scores at time 1 and time 2.**

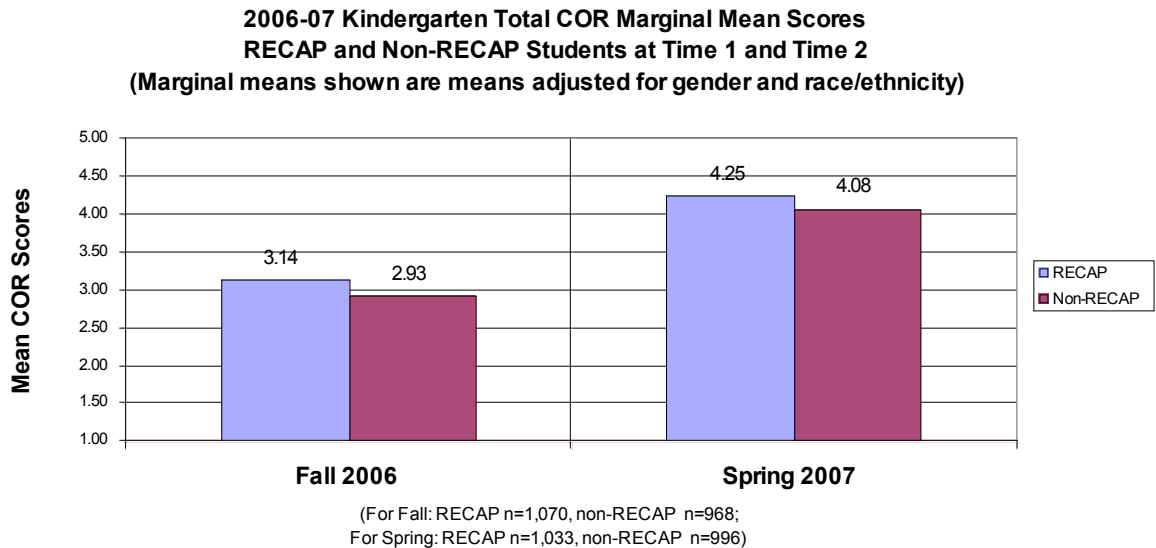
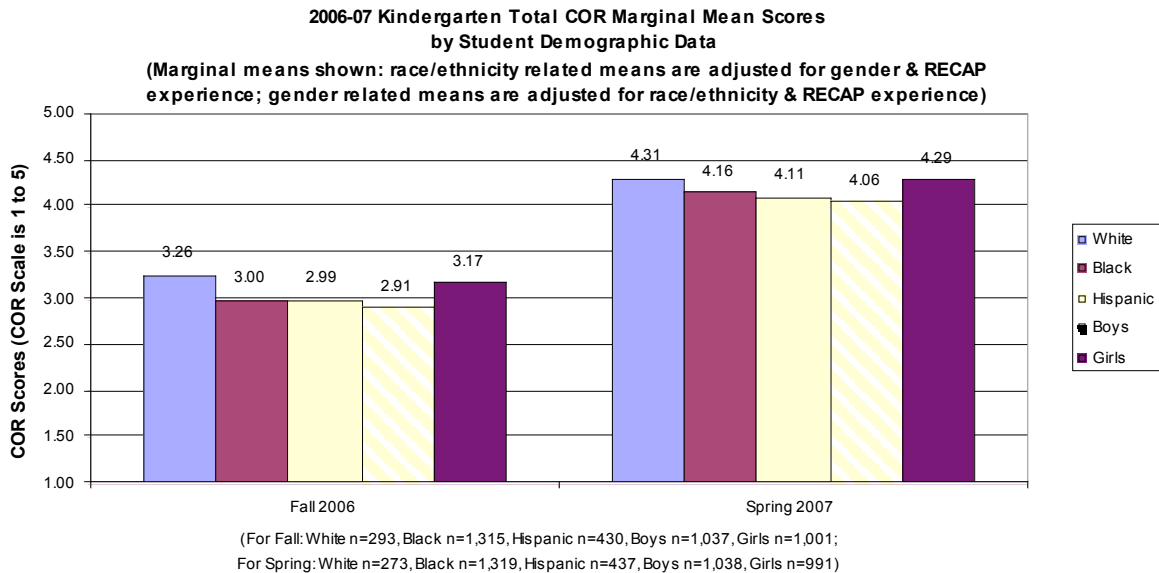


Figure V-2 below shows the differences in Kindergarten COR scores between boys and girls and the three largest race/ethnicities.

**Figure V-2 2006-07 kindergarten total COR mean scores at time 1 and time 2 by student demographics.**



### Growth in Kindergarten COR Subscales

The MANOVAs described above for the fall and spring kindergarten COR scores were repeated using the changes in 2006-07 kindergarten COR subscales as the dependent variables. The kindergarten COR change differences due to the main effect of experience were not found to be significant (Wilks' lambda=0.997, F(4,1840)=1.44, p>.05).

Gender & race/ethnicity:

Differences due to gender (Wilks' lambda=0.999, F(4,1840)=0.32, p>.05) and race/ethnicity (Wilks' lambda=0.992, F(8,3680)=1.76, p>.05) were also not significant.

Interactions:

RECAP \* gender was not significant (Wilks' lambda = 0.997, F(4,1840) = 1.60, p>.05).

RECAP \* race/ethnicity was not significant (Wilks' lambda = 0.997, F(8,3680) = 0.75, p>.05).

RECAP \* gender \* race/ethnicity was not significant (Wilks' lambda = 0.996, F(8,3680) = 0.83, p>.05).

These results match what was seen last year for growth in the subscales.

### Growth in Kindergarten Total COR

The total COR changes between the RECAP and non-RECAP groups was mildly significant (p=.03) this year F(1,1859)=5.00, p<.05) at the .05 level of confidence. The marginal mean (means adjusted for the gender and race/ethnicity covariates) total COR change in kindergarten for RECAP and non-RECAP students was 1.11 and 1.18

respectively. The overall impact of these results suggests that RECAP students start off with slightly higher scores in the fall, and also end up slightly higher in the spring. However, the differences are smaller in the spring. Figure V-3 below demonstrates the differences in graphical form.

Gender & race/ethnicity:

Gender ( $F(1,1859)=0.89, p>.05$ ); and the race/ethnicity were not significant for total COR changes ( $F(2,1859)=1.55, p>.05$ )

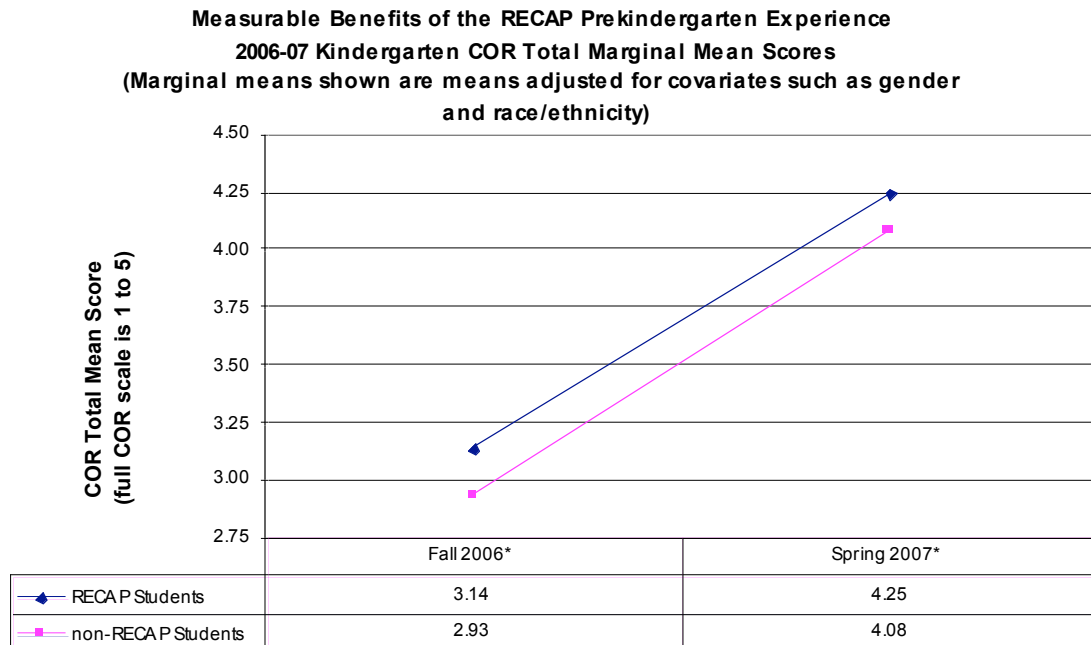
Interactions:

RECAP \* gender was not significant ( $F(1, 1859)=0.56, p>.05$ ).

RECAP \* race/ethnicity was not significant ( $F(2, 1859)=0.72, p>.05$ ).

RECAP \* gender \* race/ethnicity was not significant ( $F(2, 1859)=0.22, p>.05$ ).

**Figure V-3 benefits of the RECAP classroom experience as measured in the fall and spring.**



**RECAP Students: N=1,070 in fall, 1,033 in spring**

**non-RECAP Students: N=968 in fall, 996 in spring**

**Note: \* Signifies differences between RECAP and Non-RECAP groups significant at  $Pr(t) < .05$**

### What do these results mean?

In general, in the fall of 2006-07, the kindergarten students with RECAP classroom experience slightly outperformed students without RECAP classroom experience in their fall COR scores. The students in RECAP programs also outperformed students without RECAP experience in their spring COR scores. There was a mildly significant difference in the growth rates between the two groups. This suggests that RECAP programs benefit students and the benefits can be seen throughout the kindergarten year.

## **Discussion**

An area to investigate for future research might be whether the non-RECAP students in our analyses participated in other programs outside of RECAP. It is possible that some of them may have been in other preschool programs. For future research, we might use responses to a question in our PACE questionnaire which asks in what other preschool programs the child participated. The PACE is a Children's Institute survey for parents of students entering kindergarten, and will be used in both Kindergarten and RECAP classrooms beginning in 2007-08.

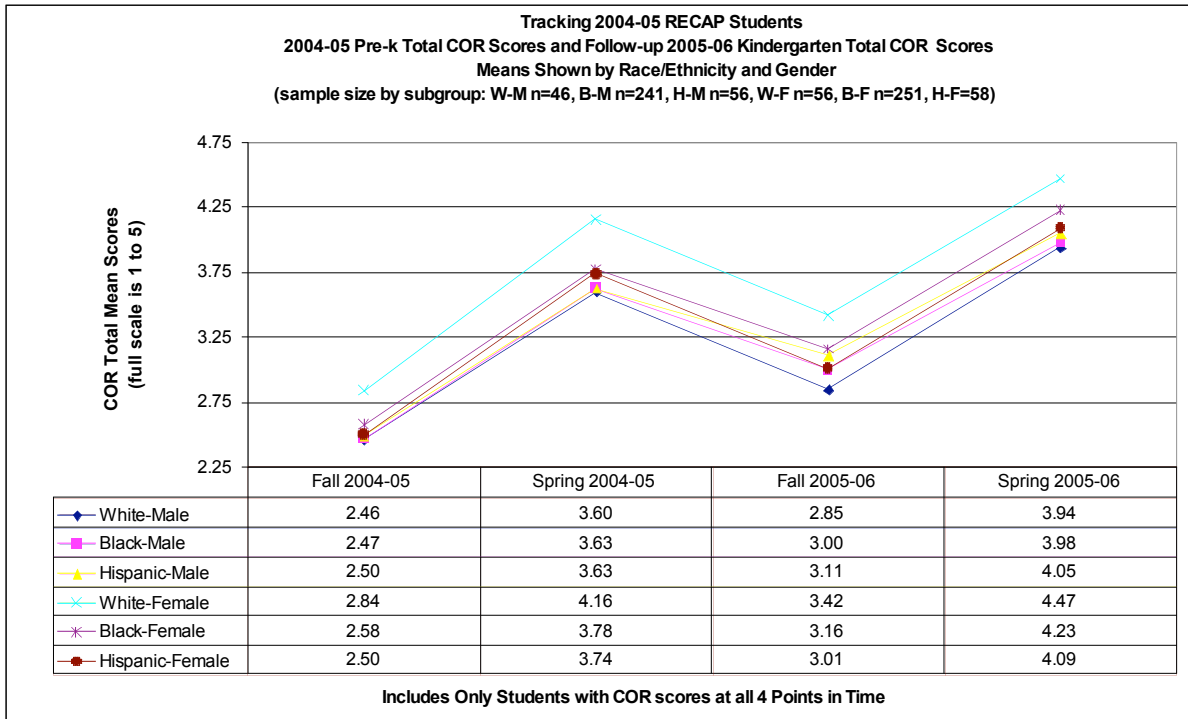
As mentioned earlier, we had an attrition rate of 56% in our initial RECAP 2005-06 student population. An area for further research might be to determine where these missing students surfaced. Are they in some other kindergarten or prekindergarten program in suburban or private schools?

### **Tracking 4-Year-Olds from Pre-k through Kindergarten**

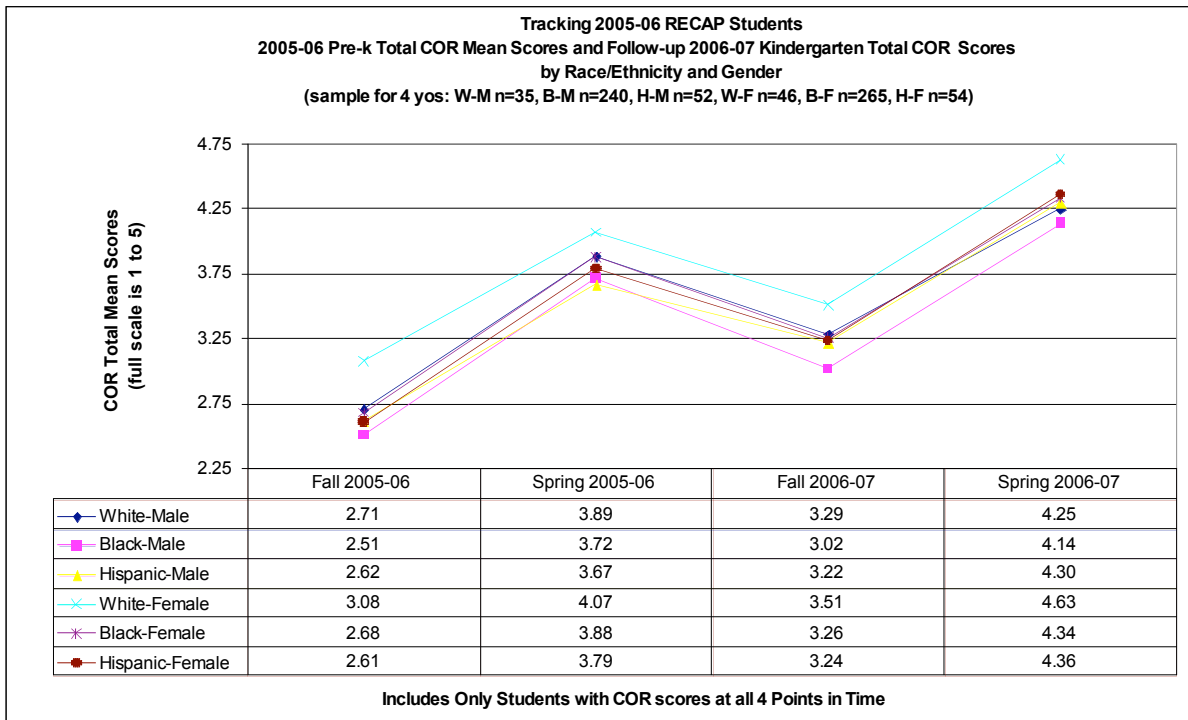
An interesting view of this follow-up analysis can be seen in Figures V-4 and V-5 below. Figure V-4 shows how the 2004-05 RECAP students performed in prekindergarten and kindergarten in 2005-06. Figure V-5 shows how the 2005-06 RECAP students performed in prekindergarten and kindergarten during the 2006-07. It is quite noticeable that the subgroup of white females either matched or outpaced all other subgroups for the entire two-year period, two years in a row. In general, the female students of all Races/Ethnicities had higher scores than the males throughout the two-year period.

Please note that the results shown in Table V-2, Figure V-4, and Figure V-5 includes only students who had complete COR scores at pre-k time 1, pre-k time 2, Kindergarten time 1, and Kindergarten time 2.

**Figure V-4 tracking 2004-05 RECAP students through 2005-06 kindergarten.**



**Figure V-5 tracking 2005-06 RECAP students through 2006-07 kindergarten.**





By tracking the total COR scores in Figures V-4 and V-5 above, we can also see that there was a noticeable decrease over the summer before kindergarten. Table V-2 below shows the size of the “summer drop” for all students combined, for the last 3 years. It can be seen from this table that there was a decrease over the summer of about 0.6 in the COR scores. Considering the standard deviation of the COR, the effect size was -0.8 again this year, a sizable drop. Table V-2 shows how consistent this “summer drop” is for each of the last 3 years.

<b>Table V-2</b>							
<b>2006-07 RECAP Annual Report</b>							
<b>“The Summer Drop for 4-Year-Olds”</b>							
<b>The decrease in COR scores for students who were 4 years old as RECAP students and then again as 5 year olds in Kindergarten</b>							
		<b>Mean Total COR Scores</b>					
<b>Kindergarten Year</b>		<b>Spring Pre-k COR as a 4-year-old</b>		<b>Fall K COR Score as a 5-year-old</b>		<b>“Summer Drop” For 4 year olds</b>	
	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Fall - Spring</b>	<b>Effect Size</b>
<b>2004-05</b>	830	3.74	0.63	3.19	0.76	-0.55	-0.80
<b>2005-06</b>	721	3.73	0.74	3.10	0.73	-0.63	-0.86
<b>2006-07</b>	706	3.81	0.73	3.19	0.85	-0.62	-0.78

### Summary

The changes between the spring of the pre-k year and the fall of the kindergarten year include: a different teacher completing the kindergarten COR observations, the student having had three months of summer vacation experience, and the child aging three months. However, the relative position of the gender and race/ethnicity differences remains the same across teachers suggesting the differences described above are stable. By comparing Figures V-4 and V-5 it can be seen that these general patterns repeated for the last two years.

### Tracking both 3 and 4 Year-Olds from Pre-k through Kindergarten

Figure V-6 below shows the COR scores for students that were 3 years old in the 2003-04 RECAP cohort tracked through kindergarten in 2005-06.

**Figure V-6 Tracking 2003-04 RECAP 3 year-old students through 2005-06 kindergarten.**

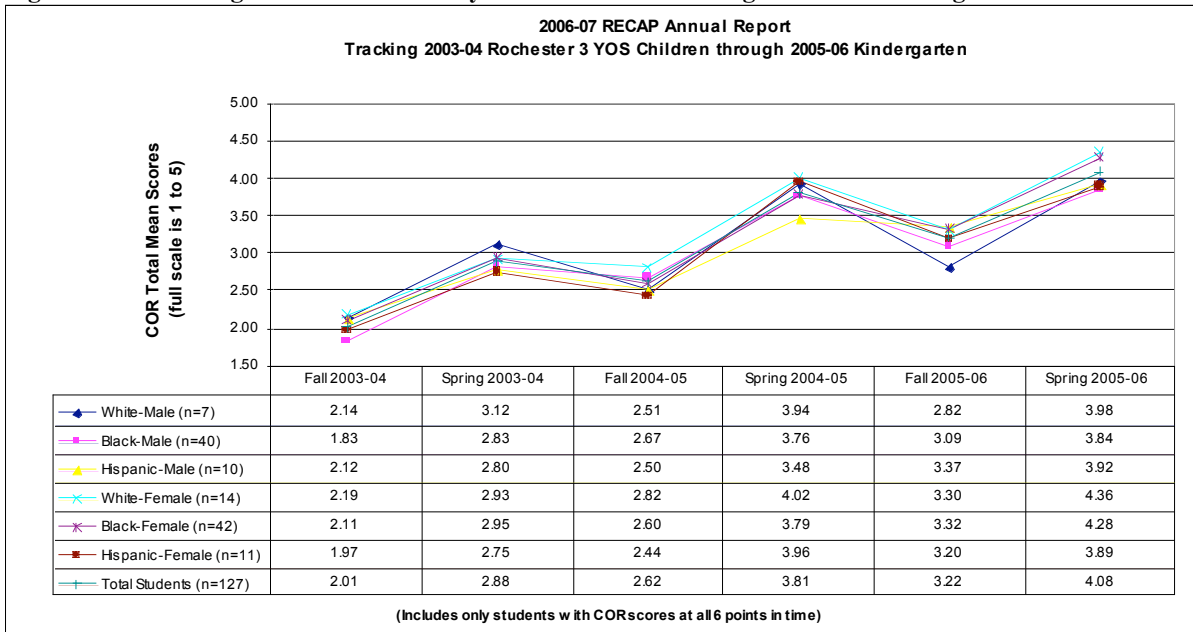


Figure V-7 below shows the COR scores for students that were 3 years old in the 2004-05 RECAP cohort tracked through kindergarten in 2006-07.

**Figure V-7 Tracking 2004-05 RECAP 3 year-old students through 2006-07 kindergarten.**

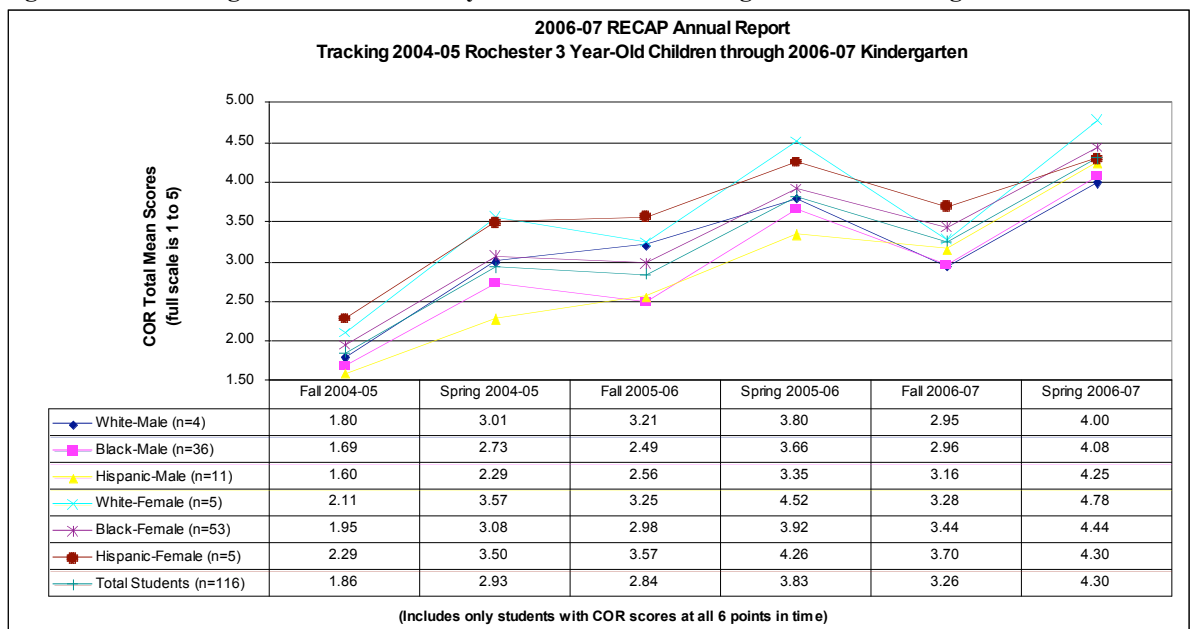


Figure V-8 below shows the COR scores for students that were 3 years old in the 2003-04 RECAP cohort tracked through 2005-06 kindergarten plus students who were in 2004-05 RECAP programs as 4-year-olds also tracked through 2005-06 kindergarten.

**Figure V-8 Tracking 2003-04 RECAP 3yos and 2004-05 RECAP 4yos through 2005-06 kindergarten.**

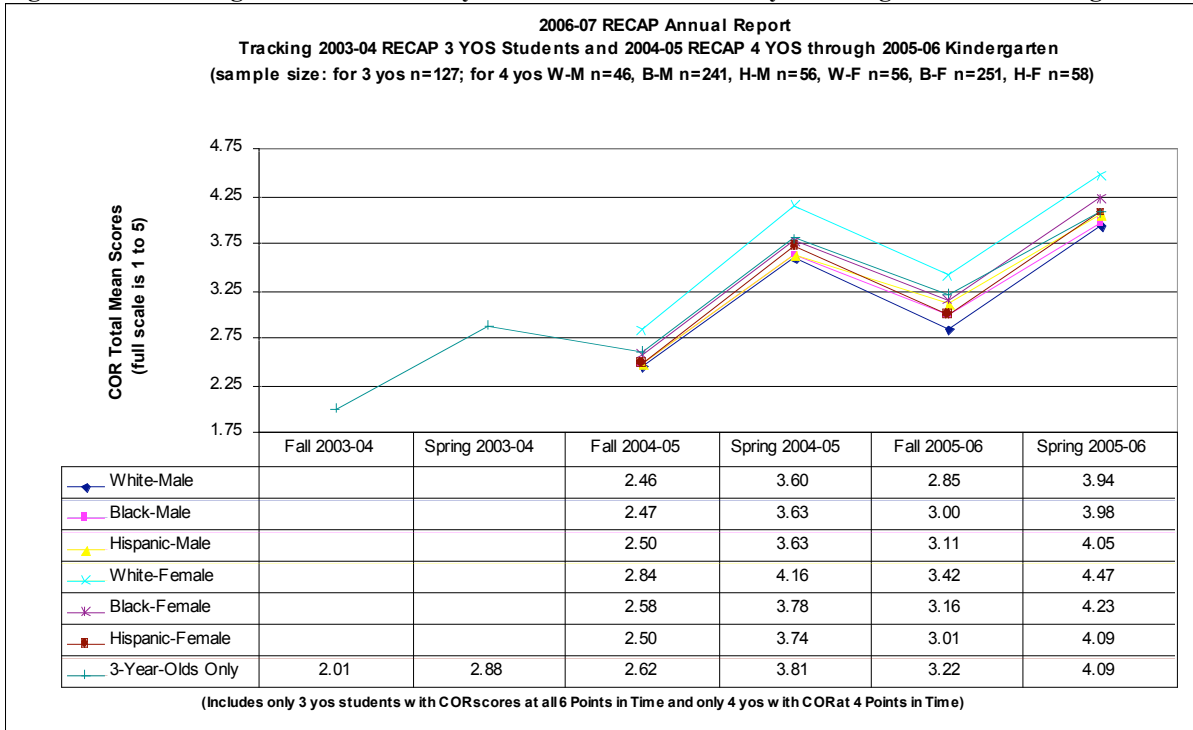
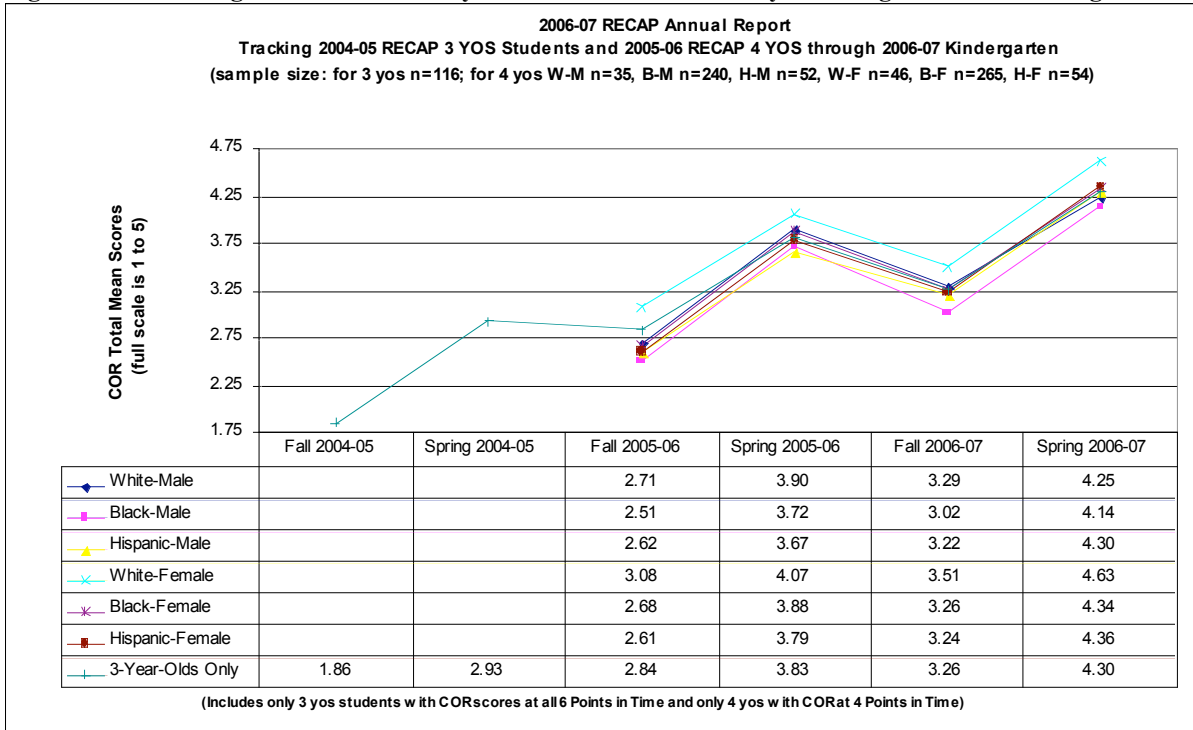


Figure V-9 below shows the COR scores for students who were 3 years old in the 2004-05 RECAP cohort tracked through 2006-07 kindergarten *plus* students who were in 2005-06 RECAP programs as 4-year-olds also tracked through 2006-07 kindergarten.

**Figure V-9 Tracking 2004-05 RECAP 3yos and 2005-06 RECAP 4yos through 2006-07 kindergarten.**



By tracking the total COR scores in Figures V-8 and V-9 above, we can also see that there was a decrease in COR scores over the summer between when a student was 3 years old in pre-k and when he or she was 4 years old in pre-k. Table V-3 below shows the size of this “summer drop” for all students combined, for the last 3 years. It can be seen from this table that there was a decrease over the summer of about 0.1 this year in the COR scores. Considering the standard deviation of the COR, the actual effect size was about 0.1 this year. A smaller summer dip was seen this year for 3-year-olds compared to the previous 2 years.

<b>Table V-3</b>							
<b>2006-07 RECAP Annual Report</b>							
<b>“The Summer Drop for 3-Year-Olds”</b>							
<b>The decrease in COR scores for students who were 3 years old as RECAP students and then again as 4-year-olds in RECAP</b>							
		<b>Mean Total COR Scores</b>					
<b>Kindergarten Year</b>	<b>N</b>	<b>Spring pre-k COR as a 3-year-old</b>		<b>Fall pre-k COR Score as a 4-year-old</b>		<b>“Summer Drop” For 3-year-olds</b>	
		<b>Mean</b>	<b>Std. Dev.</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Fall - Spring</b>	<b>Effect Size</b>
<b>2004-05</b>	98	3.06	0.62	2.92	0.63	-0.14	-0.22
<b>2005-06</b>	127	2.88	0.67	2.62	0.70	-0.26	-0.38
<b>2006-07</b>	116	2.93	0.78	2.84	0.89	-0.09	-0.11

## **KCOR Scores for Children in RECAP programs for 2 years (New Analysis)**

**Purpose:** The purpose of this analysis was to test whether students who were in a RECAP program as 3 year-olds and then again as 4 year-olds, performed differently in Kindergarten when compared to students who were in RECAP only as 4 year-olds. *In this analysis, four-year-olds were compared to four year-olds.*

**Method:** A Multiple Analysis of Variance (MANOVA) was performed with the dependent variables being the 4 COR subscales. Gender and Race/Ethnicity were controlled for in the MANOVA as covariates. The key independent variable was whether the student had 1 or 2 years of RECAP experience prior to Kindergarten.

**Results:** The results from the 3 MANOVAs can be seen in Table V-4 below. The effect of 2 years of a RECAP program compared to 1 year of a RECAP program was not found to be significant as measured by fall, spring, and changes in the 2006-07 kindergarten COR.

<b>Table V-4</b>								
<b>2006-07 RECAP Annual Report</b>								
<b>Comparing 2006-07 Kindergarten COR Scores of children who had experienced 2 years in a RECAP program with those children having experienced 1 year in RECAP program.</b>								
<b>Summary of MANOVA Results</b> (means & standard deviations shown are unadjusted data)								
	<b>Children who experienced 2 years in a RECAP program Prior to K</b>			<b>Children having experienced 1 year in RECAP program Prior to K</b>				<b>Effect Size</b>
<b>Measure / Subscale</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>N</b>	<b>F*</b>	<b>d</b>
<b>COR Time 1 MANOVA</b>							2.0	
Initiative & Social	3.19	0.95	276	3.22	0.86	788	0.7	-0.03
Movement & Music	3.27	0.96	276	3.37	0.92	788	3.6	-0.11
Language & Literacy	3.10	1.00	276	3.05	0.98	788	0.0	0.05
Math & Science	2.90	1.09	276	2.86	0.97	788	0.0	0.01
<b>COR Time 2 MANOVA</b>							3.4	
Initiative & Social	4.11	0.81	258	4.18	0.77	773	3.0	-0.09
Movement & Music	4.27	0.79	258	4.38	0.69	773	3.9	-0.14
Language & Literacy	4.39	0.89	258	4.39	0.82	773	0.1	0.00
Math & Science	4.08	0.94	258	4.20	0.85	773	5.8	-0.13
<b>COR Changes MANOVA</b>							3.1	
Initiative & Social	0.91	0.68	247	0.95	0.70	726	1.6	-0.06
Movement & Music	1.00	0.77	247	0.99	0.78	726	0.0	0.01
Language & Literacy	1.31	0.92	247	1.33	0.81	726	0.0	-0.02
Math & Science	1.19	0.93	247	1.32	0.82	726	5.4	-0.14
Notes:								
<ul style="list-style-type: none"> <li>* Signifies that none of F values in this table are significant at <math>Pr(t) \leq .001</math>.</li> <li>Gender and Race/Ethnicity were included as covariates in the above analyses.</li> </ul>								

## VI. Pre-K Children with Disabilities

### Six Key Overall Findings

These findings on the state of Rochester pre-k students classified with a disability represent the work done in a partnership between the Rochester City School District's Department of Research, Evaluation and Testing and the Department of Early Childhood Education. The findings shown below are a brief synopsis of results:

- 1) Most of the pre-k students classified as students with disabilities (within the City of Rochester RCSD is responsible for all pre-k classification and placement) participate in programs evaluated by RECAP. Five years of data now yield information on over 1,200 students. This is good news, as it indicates (with obvious exceptions) that we will be able to make informed data-driven policy decisions, because multi-year data is typically more reliable than single-year results.
- 2) The boy-girl gaps are large for this population (a fact born out by a wealth of national and local studies), and even larger than anticipated: nearly a two-to-one ratio (about two-thirds of pre-k students with disabilities are boys).
- 3) Although pre-k students classified with a disability perform at consistently lower levels than the general education population, they often make gains commensurate with those of the general education population. As a whole, they appear to be neither gaining nor losing ground compared to our general education students in pre-K.
- 4) Children classified with a disability leave pre-k in fairly good shape overall, as measured by the COR and T-CRS. Definite gains are made.

The next 5 pages summarize the data where results are described on the previous page.

Additional figures and tables presenting “Pre-k Children with Disabilities” data have been included in Appendix VI in the **RECAP 2006-07 Annual Report Statistical Supplement**. Included in the supplement are Figures VI-3 through VI-6 and Tables VI-5 through VI-10.



**Table VI-1 Number of students in RECAP programs that required one or more special services.**  
 It can be seen in Table VI-1 below that in 2006-07, 16.5% of the RECAP students were identified as requiring some special service.

<b>Table VI-1</b>										
<b>RECAP 2006-07 Annual Report</b>										
<b>Pre-k Students with Disabilities Data*</b>										
<b>Number of Students in RECAP Programs That Required One or More Special Services</b>										
<b>Includes All Ages</b>										
	<b>Number and Percentage of Children in each Pre-k Cohort</b>									
	<b>2002-03</b>		<b>2003-04</b>		<b>2004-05</b>		<b>2005-06</b>		<b>2006-07</b>	
<b>Primary Service**</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
SL – Speech/Language Therapy	109	5.2%	118	6.7%	155	7.7%	149	8.2%	163	9.4%
IS – Integrated Pre-School Special Class	69	3.3	67	3.8	61	3.0	62	3.4	66	3.8
IT – Itinerant Preschool Special Ed. Teacher	19	0.9	22	1.3	34	1.7	35	1.9	37	2.1
Other	9	0.4	9	0.5	9	0.5	10	0.6	20	1.2
#RECAP Students with a Primary Service identified.	206	9.8	216	12.3	259	12.9	256	14.0	286	16.5
#RECAP Students with a RCSD ID identified.	2,109	-	1,759	-	2,009	-	1,825	-	1,733	-
<b>Notes: *Data provided by the RCSD Research &amp; Evaluation Group.</b> <b>% Denotes that percentage is #RECAP Students with Special Services divided by total #RECAP students with a RCSD ID identified.</b> <b>** Primary Service means that for each child that required one or more special services, a single, primary service was indicated.</b>										

**Table VI-2 Number of Unique Special Services Provided for each Child.**

<b>Table VI-2</b>										
<b>RECAP 2006-07 Annual Report</b>										
<b>Pre-k Students with Disabilities Data</b>										
<b>Number of Unique Types of Service Provided for Each Child by Cohort</b>										
<b>Includes All Ages</b>										
	<b>2002-03</b>		<b>2003-04</b>		<b>2004-05</b>		<b>2005-06</b>		<b>2006-07</b>	
<b># Unique Types of Services</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>0</b>	1,903	90%	1,543	88%	1,750	87%	1,569	86%	1,449	84%
<b>1</b>	91	4	115	7	133	7	118	7	161	9
<b>2</b>	74	4	66	4	67	3	78	4	52	3
<b>3</b>	25	1	24	1	39	2	40	2	50	3
<b>4</b>	13	1	9	0	16	1	14	1	12	1
<b>5</b>	1	0	1	0	3	0	4	0	3	0
<b>6</b>	2	0	1	0	1	0	2	0	3	0
<b>Total</b>	2,109	-	1,759	-	2,009	-	1,825	-	1,733	-
<b>Note:</b>										
<b>% signifies # represented as the percentage of # column total.</b>										

Table VI-3 disabilities by student demographic information for the 2005-06 cohort.

<b>Table VI-3</b>					
<b>2005-06 RECAP Pre-k Students with Disabilities Data</b>					
<b>Demographic Information for 2005-06 RECAP Students Receiving 1 or More Special Services During the School Year</b>					
<b>Includes Only 3- and 4-Year-olds</b>					
	<b>Special Services (%)<sup>1</sup></b>		<b>No Special Services (%)<sup>1</sup></b>		
<b>Race/Ethnicity<sup>3</sup></b>	<b>Boys<sup>2</sup></b>	<b>Girls</b>	<b>Boys<sup>2</sup></b>	<b>Girls</b>	<b>Total</b>
<b>White<sup>4</sup></b>	22 (14)	13 (24)	62 (11)	89 (14)	186
<b>Black<sup>4</sup></b>	103 (67)	28 (51)	339 (62)	395 (63)	865
<b>Hispanic<sup>4</sup></b>	24 (16)	13 (24)	115 (21)	111 (18)	263
<b>Other</b>	5 (3)	1 (2)	28 (5)	36 (6)	70
<b>Total</b>	154	55	544	631	1,384

**Notes:**

- <sup>1</sup> Signifies percentage of column totals.
- <sup>2</sup> Signifies Chi-square test on gender with special services was significant ( $\chi^2 = 55.1, p < .05$ ).
- <sup>3</sup> Signifies Chi-square tests on race/ethnicity with special services was not significant. ( $\chi^2 = 4.7, p > .05$ ).
- <sup>4</sup> Signifies Chi-square tests on interactions of race/ethnicity and gender with special services were significant for Black males ( $\chi^2 = 46.8, p < .05$ ) and White males ( $\chi^2 = 5.5, p < .05$ ), but not for Hispanic males ( $\chi^2 = 2.5, p > .05$ ).

Table VI-4 disabilities by student demographic information for the 2006-07 cohort.

<b>Table VI-4</b>					
<b>2006-07 RECAP Pre-k Students with Disabilities Data</b>					
<b>Demographic Information for 2006-07 RECAP Students Receiving 1 or More Special Services During the School Year</b>					
<b>Includes Only 3- and 4-Year-olds</b>					
	<b>Special Services (%)<sup>1</sup></b>		<b>No Special Services (%)<sup>1</sup></b>		
<b>Race/Ethnicity<sup>3</sup></b>	<b>Boys<sup>2</sup></b>	<b>Girls</b>	<b>Boys<sup>2</sup></b>	<b>Girls</b>	<b>Total</b>
<b>White<sup>4</sup></b>	26 (14)	16 (19)	87 (13)	87 (12)	216
<b>Black<sup>4</sup></b>	119 (62)	47 (55)	401 (59)	411 (57)	978
<b>Hispanic<sup>4</sup></b>	38 (20)	15 (17)	134 (20)	170 (24)	357
<b>Other</b>	8 (4)	8 (9)	53 (8)	51 (7)	120
<b>Total</b>	191	86	675	719	1,671

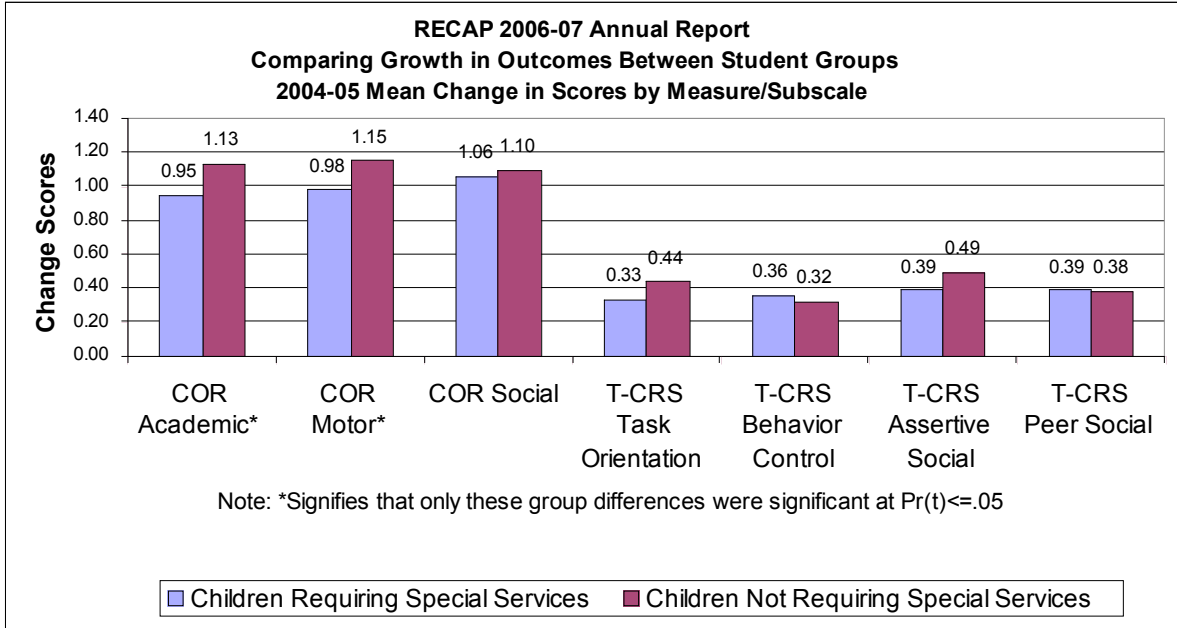
**Notes:**

- <sup>1</sup> Signifies percentage of column totals.
- <sup>2</sup> Signifies Chi-square test for gender with special services was significant (Pearson  $\chi^2 = 41.1$ ,  $p < .05$ ).
- <sup>3</sup> Signifies Chi-square tests on race/ethnicity with special services was not significant. (Pearson  $\chi^2 = 3.1$ ,  $p > .05$ ).
- <sup>4</sup> Signifies Chi-square tests on interactions of race/ethnicity and gender with special services were significant for Black males ( $\chi^2 = 27.5$ ,  $p < .05$ ) and Hispanic males ( $\chi^2 = 13.8$ ,  $p < .05$ ), but not for White males ( $\chi^2 = 1.9$ ,  $p > .05$ ).

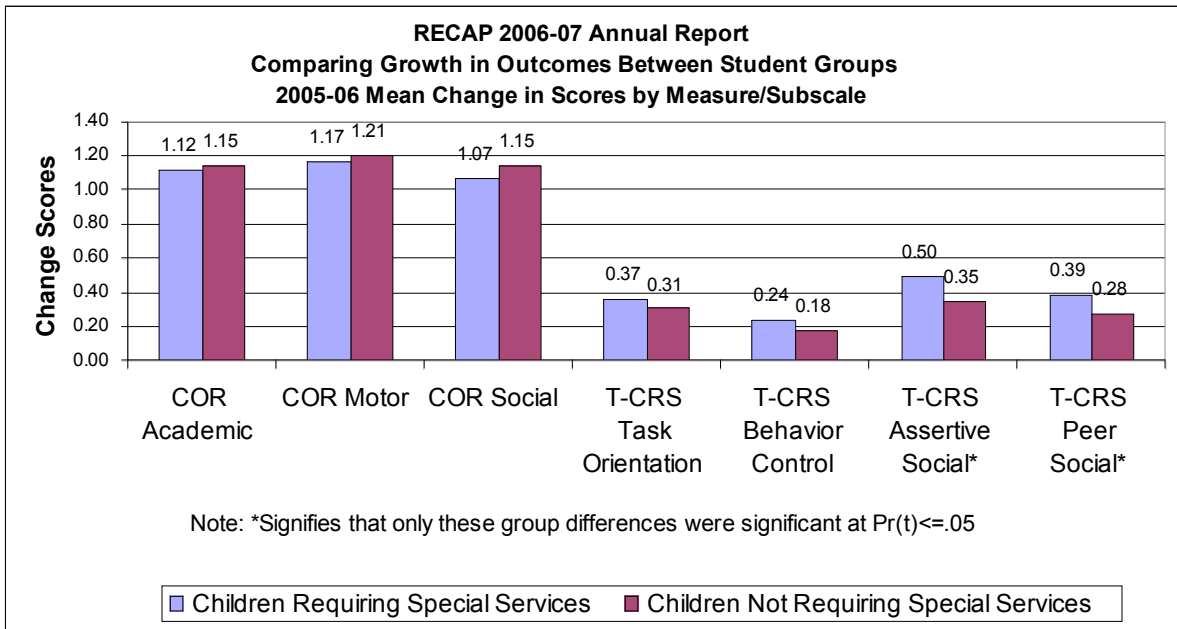
Tables VI-3 and VI-4 above demonstrate the fact that no race or ethnic group was consistently over identified. However, boys were identified more frequently than girls.

**Comparing pre to post growth for RECAP children with disabilities as compared to children who were not so identified**

**Figure VI-1 2004-05 COR and T-CRS change scores**



**Figure VI-2 2005-06 COR and T-CRS change scores**



## VII. Children's Health Information

### Survey Results

#### Overview

The CHI (first implemented in 1999) was developed by Children's Institute to provide preschool personnel with a conduit for obtaining systematic information from parents regarding their prekindergarten children, particularly in areas of overall health. The CHI serves as the Pre-K equivalent to the more comprehensive Parent Appraisal of Children's Experiences (PACE), conducted at K-2 since 1998.

The CHI covers three main areas: demographics, general health information, and parents' major developmental concerns. CHI questionnaires were completed for 799 children in 2006-07 (30% of all RECAP pupils), generally (90%) by the child's mother.

*Beginning in 2005-06, parent/guardian consent became a requirement for inclusion of each child's health information into RECAP. A total of only 799 CHI forms were processed this year and 1,039 in 2005-06.*

The following are some highlights in these findings: 23% of entering Pre-K pupils have never visited a dentist (22% last year, and 31% two years ago); we are witnessing very high rates of asthma with 22% of pupils' physicians reporting asthma (up from 19% last year); 12% of entering Pre-K pupils have been hospitalized for asthma in the past year; and approximately 26% of the parents are concerned enough about other specific problems to suggest that their children are in need of additional services (CHI Item #14 through Item #20).

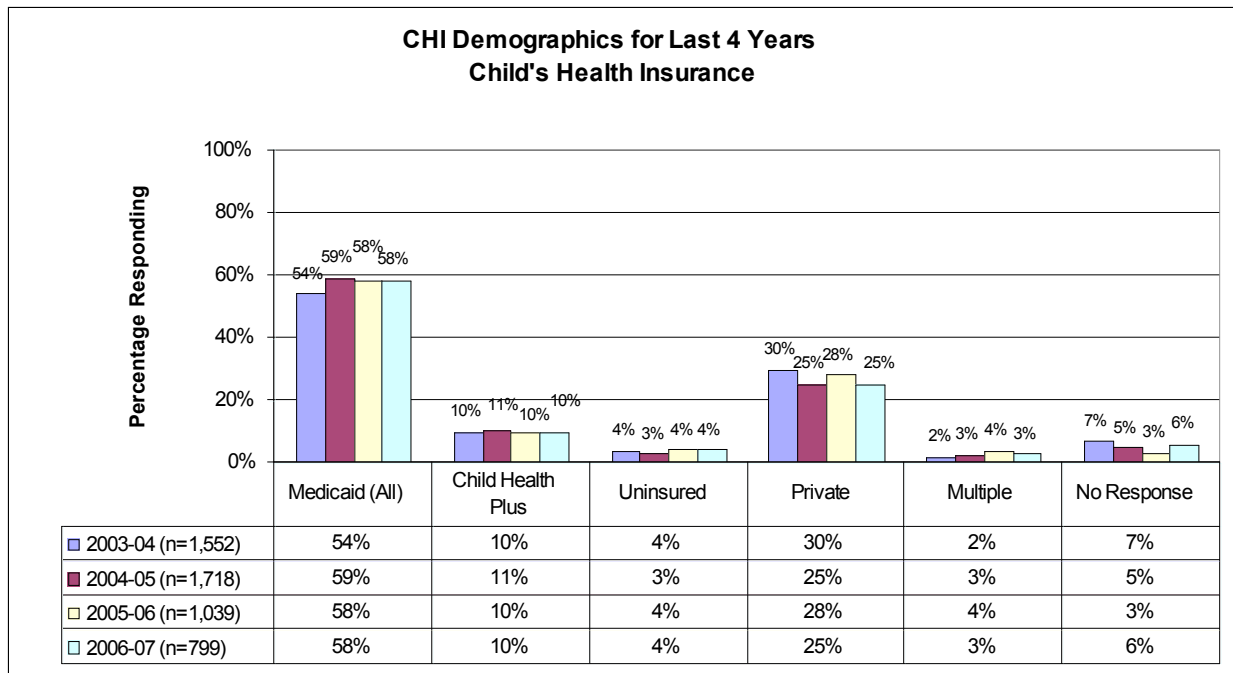
#### Section I. Summary of Major Findings – Demographic Information

This section provides information about the child and his or her family. This data was used to provide a demographic "snapshot" of the CHI sample. Items in this section include:

- a. Child's race/ethnicity: 65% of the children were Black/African-American, 23% were Latino/Hispanic, and 14% were White/Non-Hispanic.
- b. Child's home zip code: About 57% of the students this year were from only 4 zip codes: 14609, 14621, 14611, and 14605. This percentage was 60% last year for these same 4 zip codes.
- c. Whether the child has a doctor and/or has ever visited a dentist: 23% of the children were reported to have never visited a dentist (22% last year and 32% two years ago), whereas only 2% do not have a regular medical doctor.

- d. Number of adults residing with the child: The most common household composition of adult(s) living with the registered child was a single mother and no other adult (40% this year, 37% last year); the second most common included both parents<sup>1</sup> and no other adults (23% this year, 27% last year).
- e. Child’s health insurance status: 96% of children in the sample had medical insurance coverage (same as last year). 68% of the children had either Medicaid or Child Health Plus insurance in the last 2 years.

**Figure VII-1 CHI demographics: child’s health insurance.**

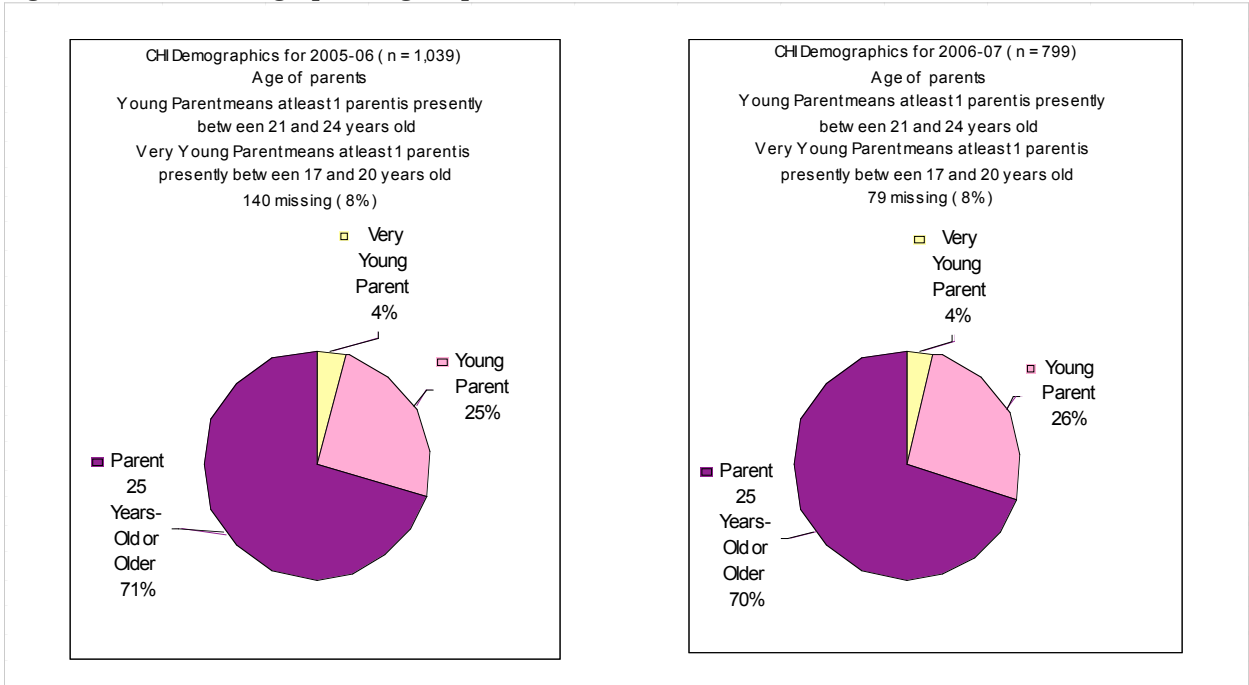


- f. In the 2006-07 survey results, regarding the ages of the mothers and fathers: 30% of mothers and/or fathers were either young or very young parents when the child was born. We define a very young or young parent (at the time of the child’s birth) as one who is 24 years old or younger when the CHI is completed. Of those parents, 4% were very young, 17-20 years old now or 13 to 16 years of age at the time of their child’s birth. Note: ages were not provided this year for 13% of mothers and 28% of fathers.

<sup>1</sup> Throughout this report, we have used the term ‘parent’ to indicate the person completing the CHI. Actually, 4% of the respondents were not the parent, although most of these were other relatives.

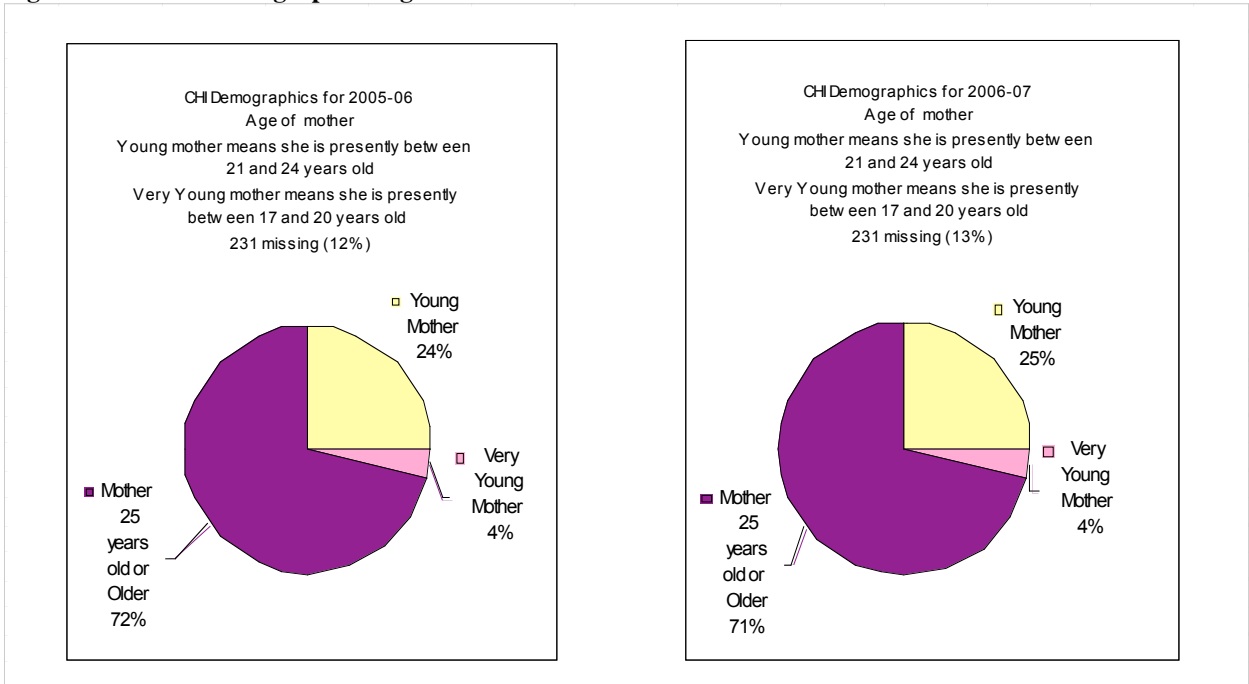
## Age of parents for last 2 years of the survey:

Figure VII-2 CHI demographics: age of parents



## Age of mother for last 2 years of the survey:

Figure VII-3 CHI demographics: age of mother





- g. The parents' highest completed level of education: Of those who answered, 79% of the mothers and 75% of the fathers had at least a high school education or had obtained a GED. This information was not provided for 17% of mothers and 28% of fathers. Nine percent of the mothers and 6% of the fathers were reported to have received special education services.

## **Section II. Summary of Major Findings – General Health Information**

In this section, parents provide information regarding children's past and current health conditions, a general health history, including hospitalizations, allergies, indications of asthma or breathing problems, and elevated lead levels.

- a. In 2006-07, parents indicated that 23% of the children have never been seen by a dentist. Last year this percentage was 22% and 2 years ago it was 31%. This is now the same level as those children entering kindergarten, which continues to be a concern. It is recommended by the American Academy of Pediatricians that children start seeing a dentist at age 18 months. Only 1% has never been to a doctor.
- b. Children's illnesses, past and present, covered a wide range of syndromes. Identified were 9% who had recurrent ear infections, 9% with behavior problems, 6% who have already had early intervention services, 4% with "low iron" (iron deficiency), and 4% who high had lead levels.
- c. Twenty-eight percent (28%) of the children had experienced a health condition that required emergency medical attention (up from 23% last year). Among the reported emergencies, 13% were related to asthma. Eighteen percent (18%) of parents reported that their child was taking at least one prescription medication (up from 15% last year).
- d. Twenty-five percent (25%) of the children this year had one or more allergies, including 11% seasonal, 5% medication, and 5% food allergies. Last year the percentages were: 22% of the children had one or more allergies, including 10% seasonal, 4% medication, and 4% food allergies.
- e. Fifteen percent (15%) of the children had been hospitalized at least overnight; this was up from 13% same last year.
- f. Ninety-seven percent (97%) of the children, according to parents in 2006-07, are in good or excellent overall health. This percentage last year was 98%, and 97% 2 years ago. Four percent of the parents reported that they would like to talk to the school nurse about their child's health.
- g. High Lead levels: Four percent (4%) of the parents reported that their child has high lead levels. We examined the rates of reported high lead levels by zip code and found the highest concentrations of occurrences this year in the 14606 (12%, or 4 children out of 33

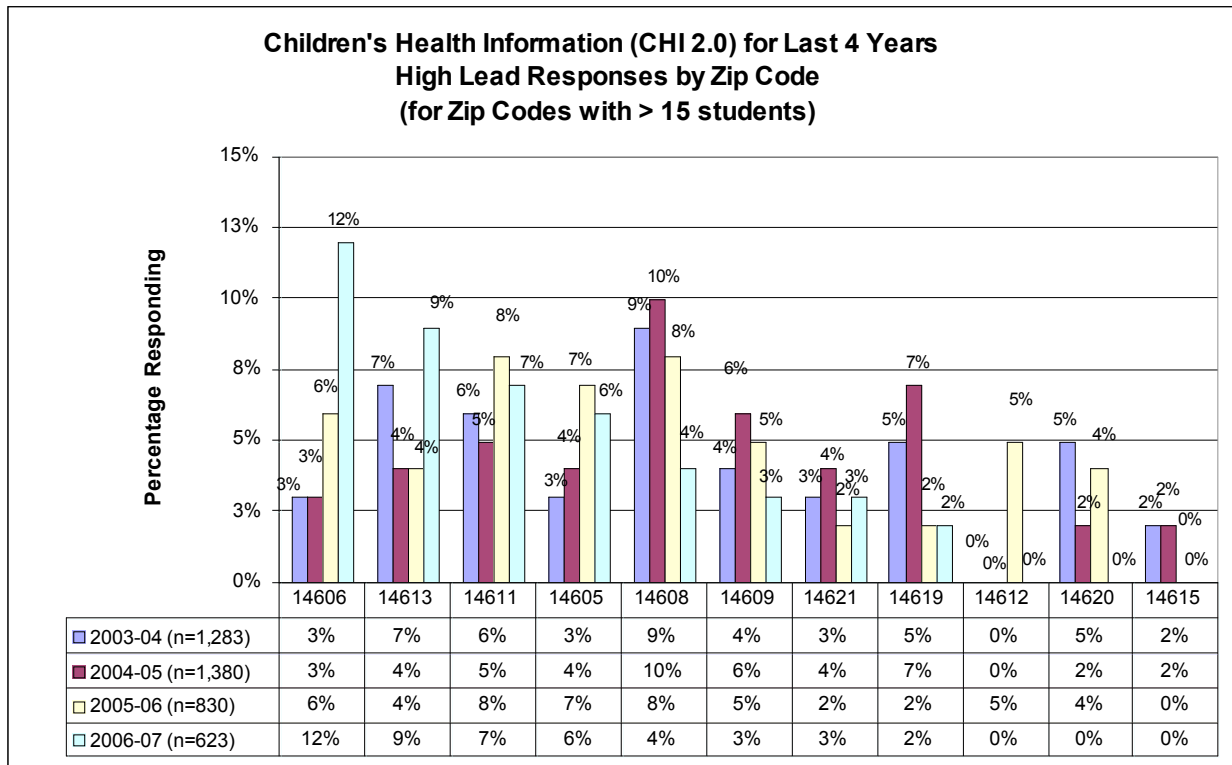
with high lead), 14613 (9%), 14611 (7%), and 14605 (6%) neighborhoods. The following includes a summary table and a chart showing the percentages of children with high lead levels by zip code for the last 4 years.

**Table VII-1 High lead response by zip code.**

High Lead Responses by Zip Code for Last 4 Years												
Zip Code*	2003-04			2004-05			2005-06			2006-07		
	Student Count in Zipcode	High Lead Count	Percent	Student Count in Zipcode	High Lead Count	Percent	Student Count in Zipcode	High Lead Count	Percent	Student Count in Zipcode	High Lead Count	Percent**
14606	61	2	3%	66	2	3%	35	2	6%	33	4	12%
14613	72	5	7%	107	4	4%	71	3	4%	45	4	9%
14611	142	8	6%	150	8	5%	93	7	8%	60	4	7%
14605	117	3	3%	105	4	4%	92	6	7%	63	4	6%
14608	109	10	9%	97	10	10%	36	3	8%	47	2	4%
14621	243	8	3%	292	12	4%	141	3	2%	121	4	3%
14609	218	8	4%	282	16	6%	183	10	5%	119	3	3%
14619	117	6	5%	103	7	7%	62	1	2%	55	1	2%
14612	54	0	0%	53	0	0%	37	2	5%	16	0	0%
14620	85	4	5%	84	2	2%	49	2	4%	32	0	0%
14615	65	1	2%	41	1	2%	31	0	0%	32	0	0%
Total	1283	55	4%	1380	66	5%	830	39	5%	623	26	4%

Notes: \* This table only includes zip codes with Student Count > 15 students in 2006-07.  
 \*\*The rows in this table are sorted in descending order by the 2006-07 Percent column.

**Figure VII-4 High lead responses by zip code.**



h. Asthma:

Several items specifically pertain to asthma and breathing problems. Overall, 22% of the children were reported to have asthma this year. Last year this percentage was 19%. Table VII-2 below contains more detailed results:

**Table VII-2 Asthma and breathing problems**

<b>Table VII-2</b>					
<b>Asthma and Breathing Problems for the Last 4 Years</b>					
<b>CHI Item #</b>	<b>Description</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>
<b>6</b>	Child needs to stop playing because of breathing problems.	8%	8%	7%	9%
<b>7</b>	At least 1 day a week child usually has wheezing, coughing, or shortness of breath.	12%	11%	11%	11%
<b>8</b>	At least 1 day a week child usually wakes up from sleep because of wheezing, coughing, or shortness of breath.	7%	7%	6%	6%
<b>9</b>	Doctor has said that child has asthma.	19%	18%	19%	22%
<b>9a</b>	Child takes medication every day to prevent asthma symptoms.	8%	8%	9%	9%
<b>9b</b>	Over the past 12 months at least 1 time child needed emergency medical visit for asthma.	12%	12%	10%	12%

For children whose doctors have diagnosed them with asthma, we estimated severity levels. For a child to be classified in the “Significant” level he or she wheezes, coughs, or is short of breath at least 3 times a week or wakes up with these symptoms at least once a week. To be in the “Mild or Past” level he or she wheezes, coughs or is short of breath fewer than 3 times a week and does not wake up with these symptoms. Looking at Table VII-3 below, five percent of the children, again year, had significant asthma symptoms; 15% had mild or past asthma (up from 13% last year and 11% two years ago); and 2% had indeterminate asthma symptoms.

**Table VII-3 asthma severity.**

Asthma Severity Scale	2003-04		2004-05		2005-06		2006-07	
	N	Percent	N	Percent	N	Percent	N	Percent
Indeterminate Asthma	14	1%	14	1%	7	1%	15	2%
Significant Asthma	82	5%	93	6%	50	5%	41	5%
Mild or Past Asthma	193	13%	190	11%	131	13%	112	15%
Item #9 Has a doctor ever said your child has asthma?	289	19%	297	18%	188	19%	168	22%
Actual responses	1510		1671		1016		770	
Non-responses	42	3%	47	3%	23	2%	29	4%
Total returned surveys	1552		1718		1039		779	

**Table VII-4 breathing problems.**

Item 7: How many days a week does your child usually have wheezing, coughing, or shortness of breath?	2003-04		2004-05		2005-06		2006-07	
	N	Percent	N	Percent	N	Percent	N	Percent
None	1314	88%	1470	89%	900	89%	673	89%
One	91	6%	92	6%	63	6%	43	6%
Two	47	3%	46	3%	21	2%	23	3%
Three	21	1%	22	1%	12	1%	4	1%
4 or more days	20	1%	22	1%	13	1%	13	2%
No response	59	4%	66	4%	30	3%	43	6%
# responses	1493	96%	1652	96%	1009	97%	756	97%
Total returned surveys	1552		1718		1039		779	

**Table VII-5 additional breathing problems.**

Item 8: How many days a week does your child usually wake up from sleep because of wheezing, coughing, or shortness of breath?	2003-04		2004-05		2005-06		2006-07	
	N	Percent	N	Percent	N	Percent	N	Percent
None	1397	93%	1537	93%	950	94%	716	94%
One	53	4%	51	3%	30	3%	23	3%
Two	27	2%	37	2%	19	2%	10	1%
Three	11	1%	20	1%	8	1%	8	1%
4 or more days	10	1%	9	1%	2	0%	4	1%
No response	54	3%	64	4%	30	3%	38	5%
# responses	1498	97%	1654	96%	1009	97%	761	98%
Total returned surveys	1552		1718		1039		779	

- i. Smoking in the child's home:  
According to the 2006-07 respondents, it was stated that no one smoked in the child's home 68% of the time, which is similar to 67% in last year's survey.

**Figure VII-5 Smoking in the home.**

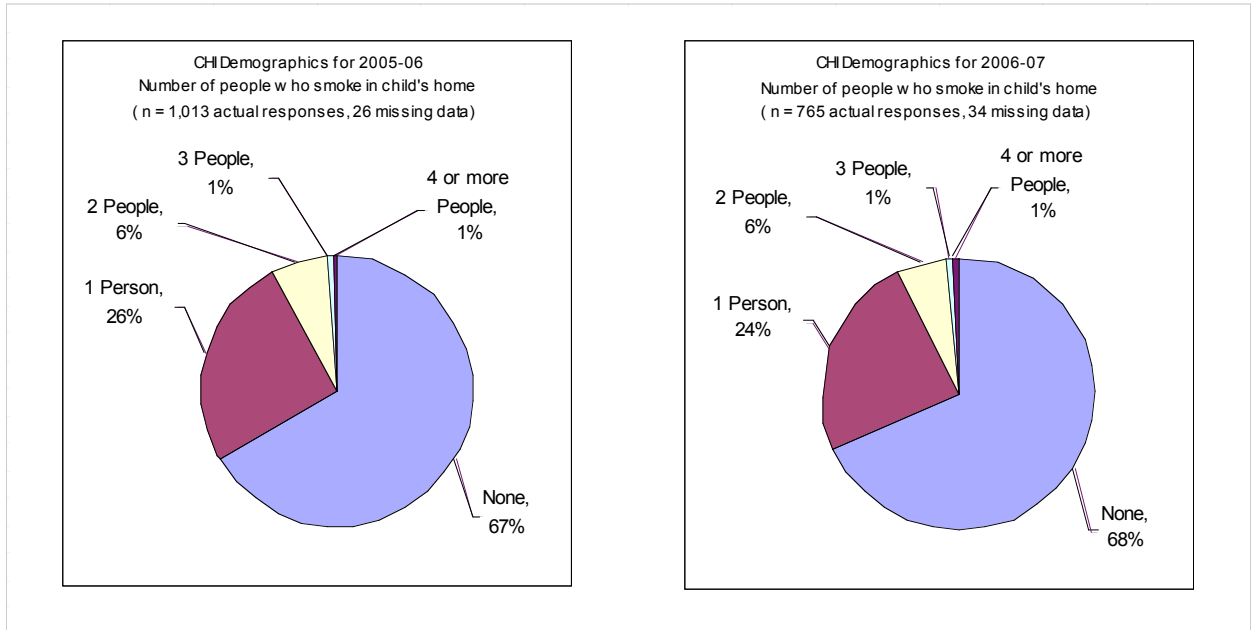


Figure VII-6 CHI health information: medical doctor visits.

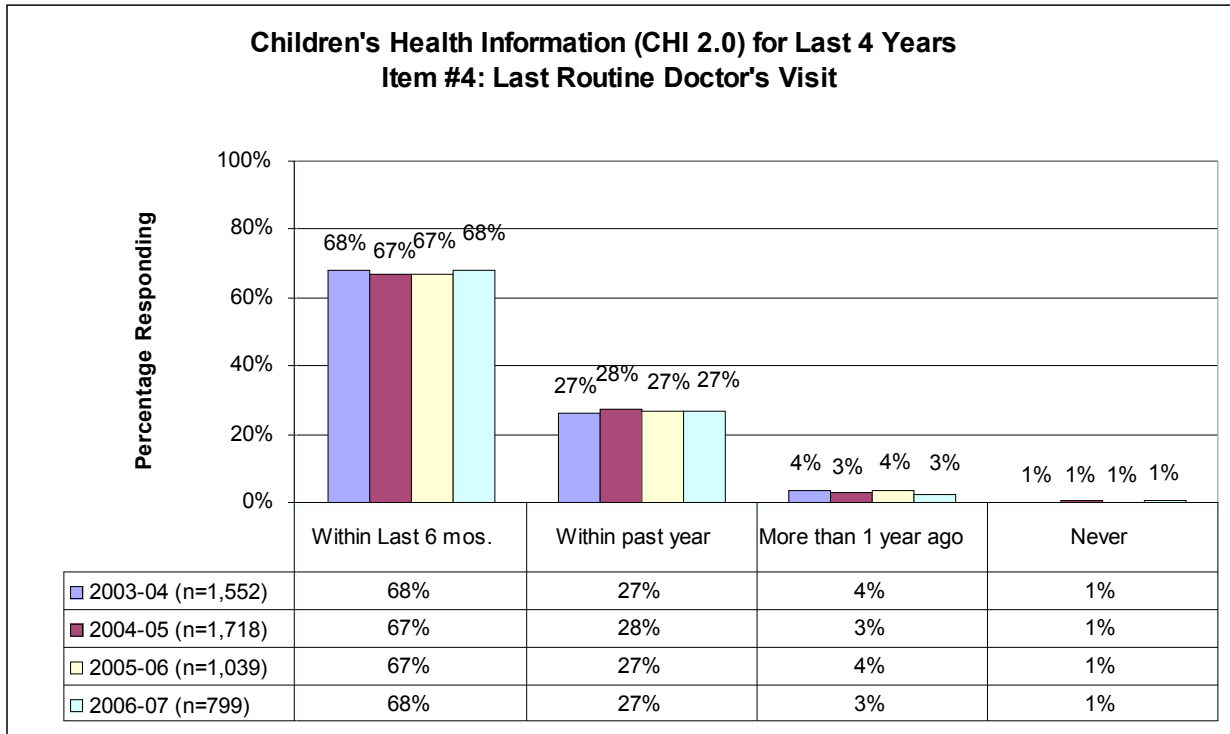
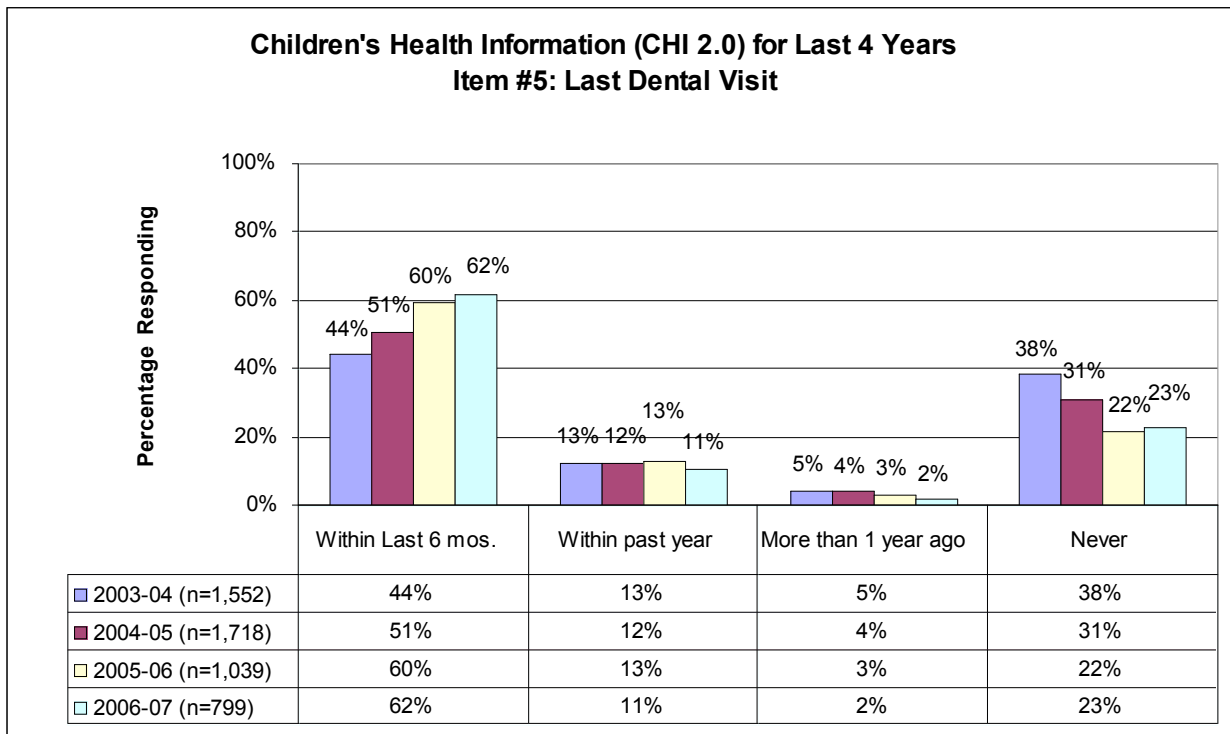
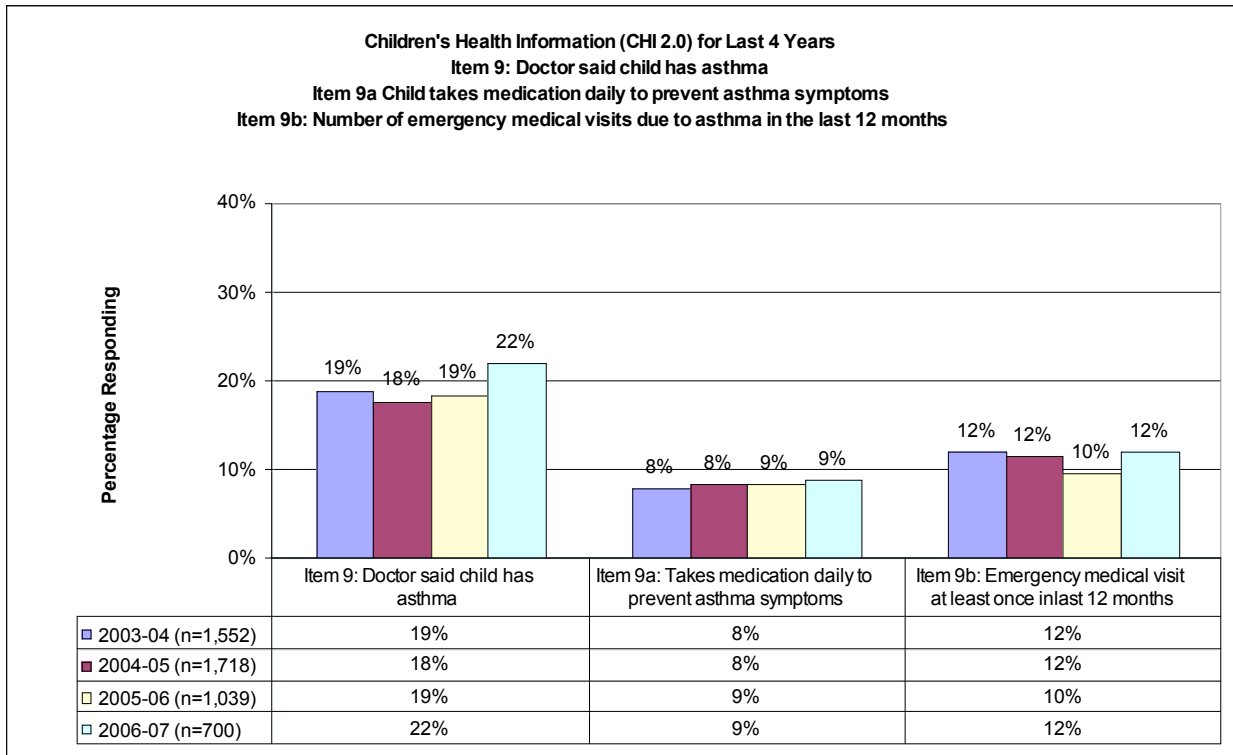


Figure VII-7 CHI health information: dental visits.



**Figure VII-8 CHI health information: asthma**



**Additional Tables VII-6 through VII-16 and Figures VII-9 through VII-13 presenting Children's Health Information data have been included in Appendix VII in the RECAP 2006-07 Annual Report Statistical Supplement.**

## **VIII. Family Support**

### **Section A. Parent Attendance**

#### **Purpose**

In addition to student classroom attendance, attendance of parents in a variety of program activities has been collected for a majority of RECAP programs. The purpose of this section is to report on actual parent attendance data for each of the participating programs and total programs.

#### **Background**

In the previous 2 years we replicated a cluster analysis on the parent attendance indicators. From those analyses three distinct categories of parent involvement were detected which was consistent across both years. These groupings for parents included: “Group Involvement,” “Individual Involvement,” and “Low Involvement” types. Last year, for all RECAP programs combined, 55% of the parents were categorized by this cluster analysis as of the “Low Involvement” type, 27% were “Group Involved” and 18% were “Individual Involved.”

In the two previous RECAP Annual Reports we also reported on findings of measurable relationships between a parent’s involvement type and the child’s outcomes in COR and T-CRS scores. Please refer to the 2004-05 and 2005-06 RECAP Annual Reports for the results of these child outcomes studies.

However, this year, we have begun a new 3 year study on overall family support and how it impacts a child’s early development. Over the next 3 years, we will be analyzing family involvement as measured by not only parent attendance data, but parent’s responses on other measures such as the Parent Questionnaire, Parent-Child Rating Scale (P-CRS), Family Involvement Questionnaire, and Early Childhood Parent (Satisfaction) Survey. This topic is discussed in more detail in Section B. of this chapter.

The following information in this section of the report simply reports current parent attendance data for the all RECAP programs combined and also by program.

#### **The Parent Attendance Data**

Parent Program Contacts: Four different types of parent-program contacts were recorded:

- 1) Number of parent group meetings attended.
- 2) Visits at parent’s home by parent group leaders or other staff
- 3) Visits to the classroom
- 4) Attendance at teacher-parent conferences



These four indicators are not independent of each other; for example, parents who did not attend parent group meetings may have received more frequent visits at their home.

### Sample

*Only those parents and students were included for whom there was a complete set of fall and spring COR observations for the student.* Having a complete set of COR scores for a student was operationalized as a sign that the student was in the classroom all year (not transient). Outliers above 3 standard deviations were removed from the data. Ten of the eleven RECAP programs supplied parent attendance data that was used in the analysis.

### Results

Table VIII-1 Count of students with both pre and post COR scores by program

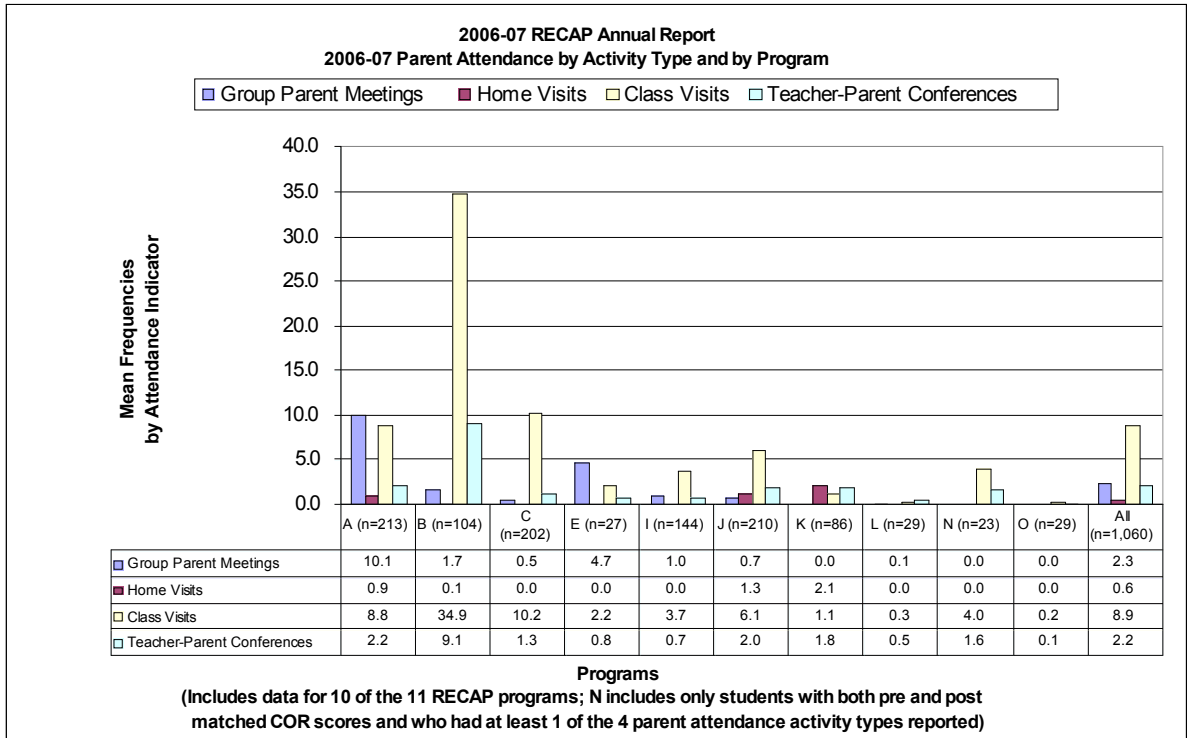
<b>Table VIII-1</b>		
<b>RECAP 2006-07 Annual Report</b>		
<b>2006-07 Student Count by Program</b>		
<b>Number of children with matching fall and spring COR scores</b>		
<b>Program</b>	<b>Number</b>	<b>Pct.</b>
<b>A</b>	349	22%
<b>B</b>	116	7
<b>C</b>	265	17
<b>E</b>	46	3
<b>F</b>	49	3
<b>I</b>	228	14
<b>J</b>	238	15
<b>K</b>	98	6
<b>L</b>	103	7
<b>N</b>	28	2
<b>O</b>	59	4
<b>Total</b>	1,579	100

Table VIII-2 below shows the mean and standard deviations of parent and child attendance data this year. One interesting observation from table VIII-2 below is that for RECAP programs overall, and for the 893 parents for whom data was collected, there was an average of 13 total contacts between parents and the program in 2006-07.

<b>Table VIII-2</b>			
<b>2006-07 RECAP Annual Report</b>			
<b>Total Attendance for All Programs Combined<sup>1</sup></b>			
<b>All Programs Combined</b>			
<b>(Only includes children with matching fall and spring COR scores)</b>			
<b>Attendance Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>
# Group Parent Sessions Held	1,060	11.6	17.8
# Group Parent Sessions Present	1,007	2.3	4.9
Pct. Group Parent Sessions Present	520	24.2%	29.2%
# Home Visits	987	0.6	1.0
# Class Visits	1,056	8.9	14.5
# Teacher-Parent Conferences	1,057	2.2	3.1
# Total Parent-Program Contacts <sup>2</sup>	893	13.1	17.2
# Days Child Could have Attended	1,225	166.7	28.6
# Days Child Attended	1,225	140.2	33.6
Pct. Child Attended	1,225	83.0%	16.1%
Notes:			
<sup>1</sup> Only 10 of the 11 RECAP programs' attendance data were included.			
<sup>2</sup> Denotes Total Contacts = # Group Leader Sessions Present + #Home Visits + # Class Visits + # Teacher-Parent Conferences			

Figure VIII-1 below shows the parent attendance data by program for 2006-07. It shows the large amount of variation between programs in the four parent attendance indicators. For example, parents of children in program A attended many parent group meetings, while those in program B had many class visitations by the parent.

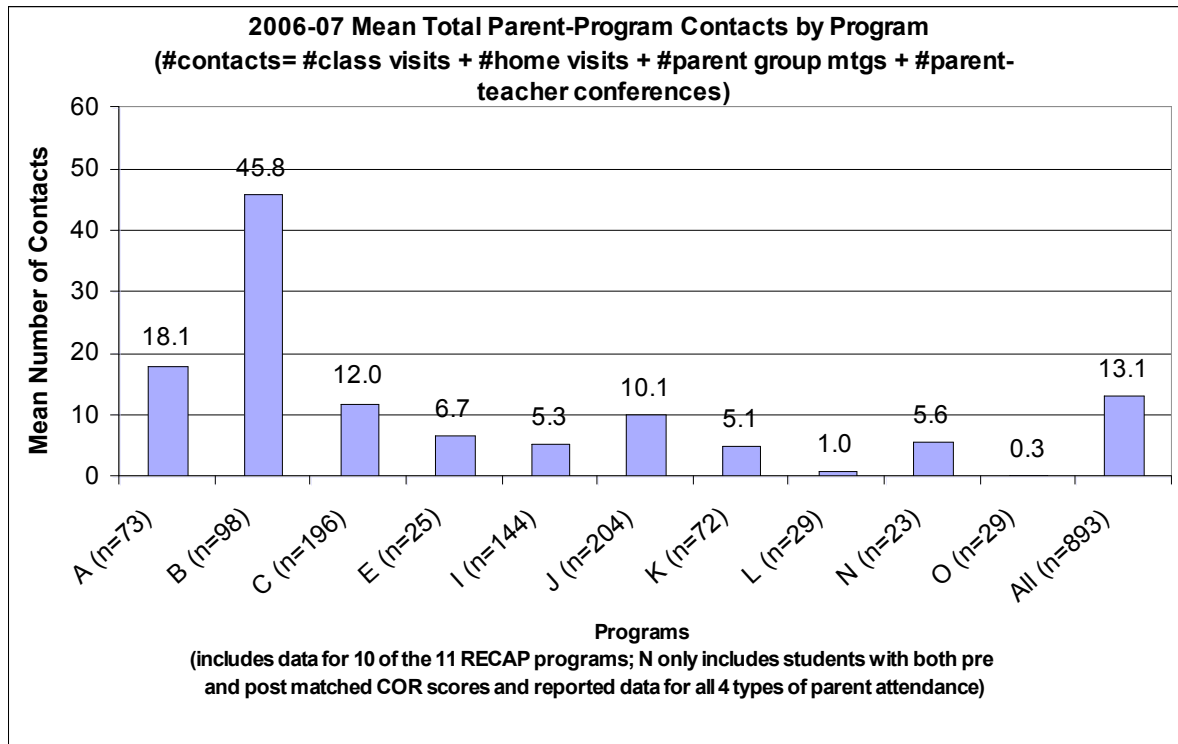
**Figure VIII-1 Parent attendance by program for 2006-07.**



**Additional Attendance Indicator**

An additional measure of parent involvement was examined in this study, “total parent-program contacts.” This is the total number of group parent meetings, home visits, class visits, and teacher-parent conferences, or simply the sum of all contacts. Figure VIII-2 below shows the mean “total parent-program contacts” displayed by program.

**Figure VIII-2 Mean Total Parent-Program Contacts by Program.**

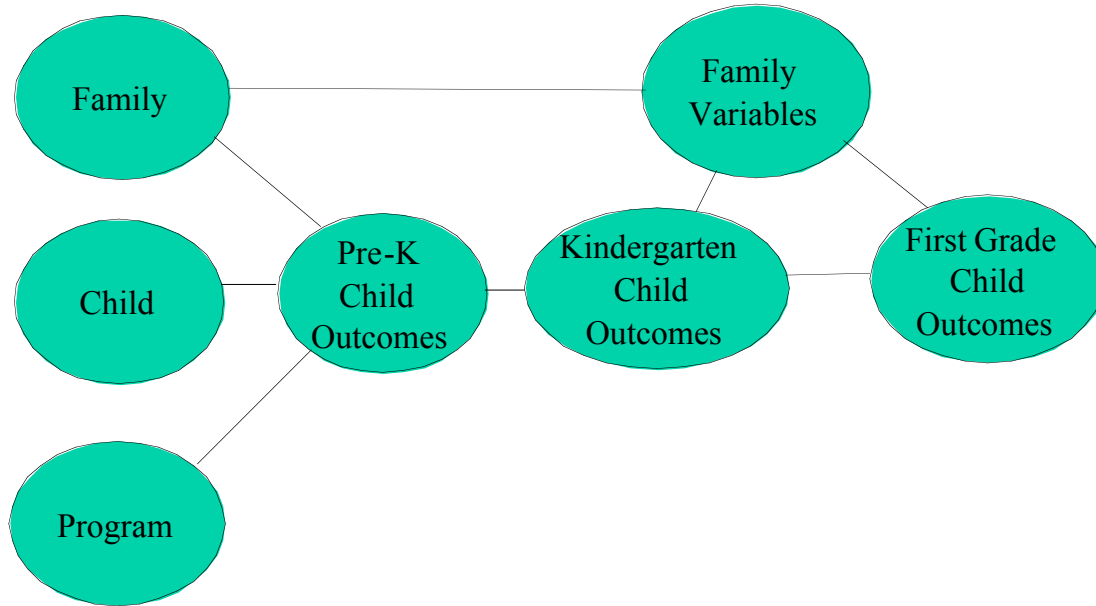


## Section B. Family Involvement and Child Outcomes (New Analysis)

### Overview

Beginning this year, we are conducting a 3 year study to identify family involvement and how it impacts early childhood development.

Figure VIII-3 the RECAP model including Family Involvement



### Purpose

This study on family involvement widens the scope of our use of parent measures and how they are used. Current parent measures include: the Parent Questionnaire, Parent-Child Rating Scale (P-CRS), Family Involvement Questionnaire (FIQ), and the Early Childhood Parent (Satisfaction) Survey. As mentioned in Section A. above we also collect parent attendance data for several parent-program activities, plus the child's classroom attendance information. The purpose of this study is to determine whether Family Involvement as measured by some combination of current parent measures and attendance data can be empirically related to a child's development as measured by the COR.

Table VIII-3 below illustrates the expected impact of Family Involvement on child outcomes.

<b>Table VIII-3</b>			
<b>A Family Involvement Hypothesis</b>			
		<b>Family Opportunities for Program Involvement</b>	
		<b>High</b>	<b>Low</b>
<b>Family Involvement at Home</b>	<b>High</b>	<b>A</b>	<b>B</b>
	<b>Low</b>	<b>C</b>	<b>D</b>
A & B – Hypothesis is that these children should generally do well. C & D – Where the extra effort is probably needed.			

### **Summary of Results**

Based upon our regression analysis results no clear family involvement indicators could be found across all programs this year. There were large differences seen between programs. The demographic variables used in these analyses including the child’s age, gender, race/ethnicity, plus time 1 COR score were a good fit across all programs and, by themselves, were a significant predictor of COR time 2 scores. In addition, the child’s attendance rate was found to be the best variable among all of the family involvement related variables tested. However, no other family involvement variables could be found that were significant across the programs.

### **Sample**

All students in 2006-07 RECAP programs with both a pre and post COR score were included in the analyses.

### **Method**

Each analyses described below was completed for each RECAP program separately and for all programs combined. Before beginning these analyses, it was understood that there was a wide range of family involvement policies by program. Also, early in the 3-year family involvement study, we did not want to lose program information by combining the data for 1 or more similar programs.

This year’s analyses were limited to only using COR totals. Also, for the most part, only the total scores for the family involvement measures were used. In future related studies we expect to test all of the subscales for these measures.



We found that many of the parent attendance and parent measure variables had missing or incomplete data. This made it difficult to attain a sufficient sample size for the regression analyses. By default, regression analysis uses the “list wise deletion” technique to determine which observations should be entered into an analysis. This technique deletes observations with missing values; it only uses observations with data that is 100% complete. Because of so many missing values in our data, we chose to replace missing values with mean values, and did not use the more common “list wise deletion” option.

Care was taken to be sure that the independent variables used in these analyses were not overly interrelated which could distort the results. No independent variables were used that had a Variance Inflation Factor (VIF) of 4.0 or more.

Regression Analysis was the analytical technique used in this study and it was completed in 2 parts (Analysis #1 and Analysis #2 below):

**Analysis #1** was performed with each child’s time 2 COR score treated as the dependent variable in the regression. In this analysis, each child’s time 1 COR score and all demographic variables plus all of family involvement variables were allowed to enter the regression equally and together. The resulting Analysis #1 regression equation or model then included all of the variables tested and identified the regression coefficient and significance level for every one of the variables. This is named the “Enter” regression technique where all variables are entered in a single step.

**Analysis #2** was also performed with each child’s time 2 COR score as the dependent variable. However, this analysis was run as a “blocked regression” and completed by allowing two “blocks of variables” to be entered. The first block in the regression included each child’s time 1 COR score and all of the demographic variables. Then, block 2 was added which was treated as a “stepwise regression” where the next best significant predictor variable from the set of family involvement variables was automatically selected, followed by the second best and then third best, until no other significant variables could be found. The “Stepwise” regression technique adds or removes variables from the model according to significance level criteria ( $p < .05$  to be entered,  $p < .10$  to be removed). The resulting Analysis #2 regression model included the COR time 1 variable plus all of the demographic variables, plus the regression coefficient and significance level for only the significant family involvement variables.

## **Results Analysis #1**

**Demographic Variables:** The results from Analysis #1 can be seen in table VIII-4 (2 parts) below. The COR time 1 scores were significant as a predictor of COR time 1 for every one of the 10 programs analyzed. The child’s age was significant for 5 out of the 10 programs. It is interesting that once we had accounted for the COR time 1 score and the child’s age, gender was only significant for 2 of the programs.

**Family Involvement Variables:** The only family involvement variable that was seen to be significant across the programs was child attendance. After the COR time 1 score and demographic variables were considered, child attendance was significant for 4 of the 10 programs. The number of parent-teacher conferences attended and the number of parent measures returned in June were the only two family involvement variables that were found to be significant for more than one program. Concerning the family involvement variables, except for child attendance, no significant results were detected.



**Table VIII-4A Family Involvement Regression Analysis #1 (Programs A through I)**

2006-07 RECAP Annual Report						
Family Involvement Regression Analysis #1 (Part 1 of 2)						
Spring COR - Measuring Relationships Between Total COR Child Outcomes and Family Involvement						
Variables by Program <sup>1</sup>						
Regression analysis results shown below where the dependent variable is the child's spring COR total and the independent variables are child demographics and family involvement variables.						
Unstandardized B regression coefficients shown; where Variance Inflation Factors (VIF) < 4.0; missing values replaced by means for all variables.						
Programs						
Variables	A	B	C	E	F <sup>2</sup>	I
Regression R Square Value	0.518	0.818	0.593	0.888	0.781	0.631
Sample Size N	349	117	265	46	49	229
<b>Variables</b>						
<b>Child Demographic Variables</b>						
Regression Constant	-0.952	6.130	-4.251	1.109	-5.459	-1.715
COR Total Time1	<b>0.629*</b>	<b>0.689*</b>	<b>0.545*</b>	<b>0.887*</b>	<b>0.836*</b>	<b>0.576*</b>
Gender (1=boys, 2=girls)	0.069	<b>0.189*</b>	<b>0.254*</b>	-0.028	0.192	0.100
Black Race/Ethnicity: 0=No 1=Yes	-0.036				0.020	0.080
Hispanic Race/Ethnicity: 0=No 1=Yes	-0.202				<b>0.906*</b>	0.227
White Race/Ethnicity: 0=No 1=Yes (Minority/Non-Minority)	0.047	0.012	-0.131	0.069	-0.309	0.115
Child's age in years at 12/1/06	<b>0.553*</b>	<b>0.287*</b>	<b>0.447*</b>	-0.058	-0.165	<b>0.542*</b>
<b>Parent Measures &amp; Attendance Variables</b>						
Child's attendance percentage	<b>0.679*</b>	0.464	<b>1.312*</b>	0.288		<b>0.603*</b>
#Group Parent Meetings Attended	-0.011	0.006	0.036	-0.015		0.029
#Home Visits Completed	0.046	-0.066		0.016		0.161
#Class Visits by Parent	0.003	<b>0.009*</b>	-0.003			-0.017
#Parent-Teacher Conferences Attended	0.039	<b>-0.042*</b>	0.023	-0.100		0.024
FIQ - School Involvement Subscale Score	-0.109	-0.263	-0.011	0.118	-0.221	0.150
FIQ - Home Involvement Subscale Score	-0.031	-0.145	-0.034	0.133	0.093	-0.030
FIQ - Parent-Teacher Involvement Subscale Score	0.098	0.232	-0.011		0.031	-0.094
PCRS Total Time1	0.074	0.167	<b>0.287*</b>	0.237	0.295	0.074
PCRS Total Time2	0.148	0.074	0.073	-0.173	-0.312	0.098
PCRS Total Change	0.189	-0.056	0.004		-0.131	0.033
PCRS - Future Expectations for Child Time1	-0.127	-0.193	0.025	-0.209	0.946	0.003
PCRS - Future Expectations for Child Time2	-0.063	-1.141	-0.065	0.098	0.154	0.274
PCRS - Future Expectations for Child Change	-0.151	0.514	0.106	-0.099	1.669	-0.283
Parent Questionnaire Section 1 Time1 (What Do you hope your child will gain?)	-0.180	-0.234	<b>-0.492*</b>	-0.090	0.077	0.027
Parent Questionnaire Section 1 Time2 (What Do you hope your child will gain?)	0.645	-0.046	<b>1.173*</b>		-0.231	-0.184
Parent Questionnaire Section 1 Change (What Do you hope your child will gain?)	-0.362	0.277	-0.471		<b>-3.575*</b>	-0.485
Satisfaction - Overall Satisfaction	-0.108	0.031	-0.009	0.008	0.292	-0.066
#Parent Forms returned Time1 in October	-0.022	0.054	0.053	-0.104	-0.108	-0.034
#Parent Forms returned Time2 in February	<b>0.110*</b>	-0.002	-0.009	0.019	0.065	0.094
#Parent Forms returned Time3 in June	<b>-0.086*</b>	-0.044	<b>0.108*</b>	0.035	-0.010	0.027
Notes: * Significant at p<.05						
<sup>1</sup> Variables are sometimes excluded (blank) if found to be highly inter-correlated with other variables.						
<sup>2</sup> Denotes a program that does not report child or parent attendance data.						



**Table VIII-4B Family Involvement Regression Analysis #1 (Programs J through All Combined)**

2006-07 RECAP Annual Report						
Family Involvement Regression Analysis #1 (Part 2 of 2)						
Spring COR - Measuring Relationships Between Total COR Child Outcomes and Family Involvement Variables by Program <sup>1</sup>						
Regression analysis results shown below where the dependent variable is the child's spring COR total and the independent variables are child demographics and family involvement variables.						
Unstandardized B regression coefficients shown; where Variance Inflation Factors (VIF) < 4.0; missing values replaced by means for all variables.						
Programs (Continued)						
Variables	J	K	L	N	O	ALL
<b>Regression R Square Value</b>	0.369	0.825	0.878	0.861	0.737	0.543
<b>Sample Size N</b>	238	99	104	29	59	1,584
<b>Variables</b>						
<b>Child Demographic Variables</b>						
Regression Constant	2.253	4.552	0.144	2.478	-1.336	-1.144*
COR Total Time1	<b>0.342*</b>	<b>0.587*</b>	<b>0.973*</b>	<b>0.835*</b>	<b>0.498*</b>	<b>0.627*</b>
Gender (1=boys, 2=girls)	0.114	0.126	0.060	0.212	0.132	<b>0.128*</b>
Black Race/Ethnicity: 0=No 1=Yes	0.059	0.024		-0.111		0.010
Hispanic Race/Ethnicity: 0=No 1=Yes	-0.024	-0.033				-0.037
White Race/Ethnicity: 0=No 1=Yes (Minority/Non-Minority)	0.116	<b>-0.268*</b>	-0.197		0.035	0.024
Child's age in years at 12/1/06	0.099	<b>0.245*</b>	-0.074	0.060	0.152	<b>0.389*</b>
<b>Parent Measures &amp; Attendance Variables</b>						
Child's attendance percentage	0.108	-0.236	0.278	<b>3.074*</b>	0.320	<b>0.653*</b>
#Group Parent Meetings Attended	0.020		0.061			0.003
#Home Visits Completed	<b>-0.200*</b>	0.053				<b>0.067*</b>
#Class Visits by Parent	0.007	0.021	-0.032	-0.008		-0.002
#Parent-Teacher Conferences Attended	<b>0.111*</b>	0.024	0.100		-0.406	0.005
FIQ - School Involvement Subscale Score	0.009		0.188		0.113	-0.012
FIQ - Home Involvement Subscale Score	0.114	-0.183	<b>-0.295*</b>		-0.129	0.040
FIQ - Parent-Teacher Involvement Subscale Score	-0.030	0.227	0.026			-0.014
PCRS Total Time1	0.160	-0.218	-0.111		0.277	<b>0.152*</b>
PCRS Total Time2	-0.052	<b>-0.538*</b>			0.234	0.039
PCRS Total Change	0.241	0.627	-0.217			0.145
PCRS - Future Expectations for Child Time1	-0.092	0.219	0.036	-1.107	0.161	<b>-0.117*</b>
PCRS - Future Expectations for Child Time2	0.043	0.434	0.183		-0.150	-0.003
PCRS - Future Expectations for Child Change	-0.046	-0.578	-0.114			-0.108
Parent Questionnaire Section 1 Time1 (What Do you hope your child will gain?)	-0.094	-0.325	0.339	0.366	-0.064	-0.130
Parent Questionnaire Section 1 Time2 (What Do you hope your child will gain?)	-0.117	0.394	0.358		0.431	<b>0.403*</b>
Parent Questionnaire Section 1 Change (What Do you hope your child will gain?)	0.231	-0.152				-0.208
Satisfaction - Overall Satisfaction	0.000	-0.329	-0.114	0.121		-0.031
#Parent Forms returned Time1 in October	-0.009	-0.072	-0.103	-0.075	-0.128	-0.030
#Parent Forms returned Time2 in February	0.035	0.043	0.050	0.242	0.081	<b>0.039*</b>
#Parent Forms returned Time3 in June	0.036	0.012	0.012	0.238	-0.052	0.032
Notes: * Significant at p<.05						
<sup>1</sup> Variables are sometimes excluded (blank) if found to be highly inter-correlated with other variables.						
<sup>2</sup> Denotes a program that does not report child or parent attendance data.						



## Results Analysis #2

The results from Analysis #2 can be seen in table VIII-5 (2 parts) below.

**Demographic Variables:** The results from Analysis #2 can be seen in table VIII-5 (2 parts) below. These results from this analysis were similar to what was seen in the Analysis #1 results. The COR time 1 scores were significant as a predictor of COR time 2 for every one of the 10 programs analyzed. The child's age was significant for 5 out of the 10 programs. Once again, it was interesting that once we have accounted for COR time 1 score and the child's age, gender was only significant for 2 of the programs.

**Family Involvement Variables:** The only family involvement variable that was seen to be significant across the programs was child attendance. After the COR time 1 score and demographic variables were considered, child attendance was significant for 5 (one more program than in Analysis #1) of the 10 programs. The number of total parent-program contacts and the score for time 1 of section 1 (What do you hope your child will gain?) of the Parent Questionnaire were both found to be significant for 3 of the programs. The sign on the coefficients for 1 program's total contacts and for all 3 programs' Parent Questionnaire results were negative, meaning that the higher the variable, the lower the child's COR score.

In general, however, when looking at the results from the family involvement variables, except for child attendance, no significant results were detected in Analysis #2.

**Table VIII-5A Family Support Regression Analysis #2 (Programs A through I)**

2006-07 RECAP Annual Report						
Family Involvement Regression Analysis #2 (Part 1 of 2)						
Spring COR - Measuring Relationships Between Total COR Child Outcomes and Family Involvement						
Variables by Program <sup>1</sup>						
Blocked regression analysis results shown below where the dependent variable is the child's spring COR total and the independent variables are child demographics in regression block #1 and family involvement variables in regression block #2.						
	Unstandardized B regression coefficients shown; where Variance Inflation Factors (VIF) < 4.0;					
	Programs					
Variables	A	B	C	E	F <sup>2</sup>	I
<b>Sample Size N</b>	349	117	265	46	49	229
<b>Regression Block #1 - Child Demographics (Enter Method)</b>						
Regression Constant	-0.842	-0.529	<b>-4.158*</b>	<b>1.269*</b>	1.402	<b>-.913*</b>
COR Total Time1	<b>0.638*</b>	<b>0.689*</b>	<b>0.540*</b>	<b>0.964*</b>	<b>0.726*</b>	<b>0.641*</b>
Gender (1=boys, 2=girls)	0.061	<b>0.217*</b>	<b>0.260*</b>	-0.058	0.095	0.108
Black Race/Ethnicity: 0=No 1=Yes	-0.026				0.155	0.049
Hispanic Race/Ethnicity: 0=No 1=Yes	-0.167				0.256	0.217
White Race/Ethnicity: 0=No 1=Yes (Minority/Non-Minority)	0.070	0.193	-0.150	0.120	0.114	0.112
Child's age in years at 12/1/06	<b>0.540*</b>	<b>0.329*</b>	<b>0.451</b>	-0.031	-0.165	<b>0.480*</b>
<b>Regression Block #1 R Square Value</b>	0.463	0.750	0.502	0.819	0.614	0.593
<b>Regression Block #2 - Parent Variables (Stepwise Method)</b>						
Child's attendance percentage	<b>0.735*</b>	<b>0.610*</b>	<b>1.322*</b>			<b>0.601*</b>
#Group Parent Meetings Attended						
#Home Visits Completed						
#Class Visits by Parent						
#Parent-Teacher Conferences Attended						
# Total Parent-Program Contacts (sum of 4 rows above)				<b>-0.021*</b>		
FIQ - School Involvement Subscale Score						
FIQ - Home Involvement Subscale Score						
FIQ - Parent-Teacher Involvement Subscale Score						
PCRS Total Time1			<b>0.285*</b>			
PCRS Total Time2						
PCRS Total Change						
PCRS - Future Expectations for Child Time1						
PCRS - Future Expectations for Child Time2						
PCRS - Future Expectations for Child Change						
Parent Questionnaire Section 1 Time1 (What Do you hope your child will gain?)			<b>-0.400*</b>			
Parent Questionnaire Section 1 Time2			<b>1.010*</b>			
Parent Questionnaire Section 1 Change						
Satisfaction - Overall Satisfaction						
#Parent Forms returned Time1 in October						
#Parent Forms returned Time2 in February	<b>0.116*</b>		<b>0.123*</b>			
#Parent Forms returned Time3 in June	<b>-0.100*</b>					
<b>Regression Block #2 R Square Value</b>	0.493	0.759	0.584	0.847	0.614	0.601
<b>Increase in R Square Value (Block #2 - Block #1)</b>	<b>.030*</b>	<b>.009*</b>	<b>.082*</b>	<b>.028*</b>	0.000	<b>.008*</b>
Notes: * Significant at p<.05						
<sup>1</sup> Variables are sometimes excluded if found to be highly inter-correlated with other variables.						
<sup>2</sup> Denotes a program that does not report child or parent attendance data.						



**Table VIII-5B Family Support Regression Analysis #2 (Programs J through All Combined)**

2006-07 RECAP Annual Report						
Family Involvement Regression Analysis #2 (Part 2 of 2)						
Spring COR - Measuring Relationships Between Total COR Child Outcomes and Family Involvement Variables by Program <sup>1</sup>						
Blocked regression analysis results shown below where the dependent variable is the child's spring COR total and the independent variables are child demographics in regression block #1 and family involvement variables in regression block #2.						
	Unstandardized B regression coefficients shown; where Variance Inflation Factors (VIF) < 4.0; missing values					
	Programs					
Variables	J	K	L	N	O	ALL
Sample Size N	238	99	104	29	59	1,584
<b>Regression Block #1 - Child Demographics (Enter Method)</b>						
Regression Constant	3.077	2.437	-0.290	-2.034	0.098	-1.642*
COR Total Time1	<b>0.398*</b>	<b>0.624*</b>	<b>0.991*</b>	<b>0.692*</b>	<b>0.475*</b>	<b>0.633*</b>
Gender (1=boys, 2=girls)	0.104	0.103	0.061	-0.095	0.101	<b>0.129*</b>
Black Race/Ethnicity: 0=No 1=Yes	0.027	-0.004		0.187		0.010
Hispanic Race/Ethnicity: 0=No 1=Yes	-0.015	-0.062				-0.040
White Race/Ethnicity: 0=No 1=Yes (Minority/Non-Minority)	0.197	<b>-0.268*</b>	<b>-0.295*</b>		0.102	0.034
Child's age in years at 12/1/06	0.108	<b>0.195*</b>	-0.107	0.291	0.140	<b>0.393*</b>
<b>Regression Block #1 R Square Value</b>	0.119	0.754	0.847	0.688	0.610	0.511
<b>Regression Block #2 - Parent Variables (Stepwise Method)</b>						
Child's attendance percentage				<b>2.350*</b>		<b>0.650*</b>
#Group Parent Meetings Attended						
#Home Visits Completed	<b>-0.192*</b>					<b>0.072*</b>
#Class Visits by Parent						
#Parent-Teacher Conferences Attended					<b>-0.640*</b>	
# Total Parent-Program Contacts (sum of 4 rows above)	<b>0.095*</b>	<b>0.019*</b>				
FIQ - School Involvement Subscale Score						
FIQ - Home Involvement Subscale Score						
FIQ - Parent-Teacher Involvement Subscale Score						
PCRS Total Time1						<b>0.099*</b>
PCRS Total Time2		<b>-0.271*</b>				
PCRS Total Change						
PCRS - Future Expectations for Child Time1						
PCRS - Future Expectations for Child Time2						
PCRS - Future Expectations for Child Change						
Parent Questionnaire Section 1 Time1 (What Do you hope your child will gain?)	<b>-0.279*</b>				<b>-0.422*</b>	
Parent Questionnaire Section 1 Time2			<b>0.527*</b>			<b>0.278*</b>
Parent Questionnaire Section 1 Change						
Satisfaction - Overall Satisfaction						
#Parent Forms returned Time1 in October		<b>-0.092*</b>				
#Parent Forms returned Time2 in February						<b>0.043*</b>
#Parent Forms returned Time3 in June						
<b>Regression Block #2 R Square Value</b>	0.322	0.795	0.854	0.763	0.695	0.536
<b>Increase in R Square Value (Block #2 - Block #1)</b>	<b>.203*</b>	<b>0.041*</b>	<b>0.007*</b>	<b>0.075*</b>	<b>0.085*</b>	<b>0.025*</b>
Notes: * Significant at p<.05						
<sup>1</sup> Variables are sometimes excluded if found to be highly inter-correlated with other variables.						
<sup>2</sup> Denotes a program that does not report child or parent attendance data.						



## **Additional Analyses**

It was thought that the COR time 1 score might be acting as a “proxy” for family involvement and therefore “covering up” other parent involvement variables. However, when this hypothesis was tested by rerunning the regression analyses in Analysis #1 and #2 without the COR time 1 variable (to see if parent involvement variables replaced the COR time 1 score) no new, consistent patterns of parent involvement variables appeared.

Analyses #1 and #2 were rerun with the time 1 to time 2 change in COR as the dependent variable. Other than for the demographic variables, no new, consistent patterns of the parent involvement variables appeared.

## **Discussion**

In future studies, we will need to look at the high rate of missing values in some RECAP measures. We will also need to investigate how missing values are treated in our attendance database and how this impacts our studies.

Because of the relatively small sample size of students for some programs, we may need to combine data for some selected similar programs.

All analyses described above were performed, with only one exception (the FIQ measure), using the total score for each measure. In the future, we should repeat these analyses, but use the subscales for each measure. We should also try using the Teacher-Child Rating Scale (T-CRS) subscales as the dependent variable in the regression analyses.

## **IX. Gender Gap Data Analysis (New Analysis)**

### **History:**

In attempt to better understand and document the “Pre-K Gender Gap”, most of the RECAP measures and items within each measure were analyzed in 2005-06 regarding differences between boys and girls. The highlights of these findings were summarized in Chapter X of last year’s **RECAP 2005-06 Annual Report**. The detailed results of this analysis can be seen in Tables X-1 through X-9 and Figures X-1 through X-4 in Appendix X of last year’s **RECAP 2005-06 Annual Report Statistical Supplement**.

### **2006-07 Analysis: Gender Gap by Teacher Analysis**

#### **Purpose:**

For some time now we have been observing a small, but significant difference in the RECAP COR outcomes between boys and girls. Last year we documented these differences due to gender in the RECAP 2005-06 Annual Report. The purpose of this analysis is to identify whether certain teachers or groups of teachers can be identified as having less or more of a gender gap than other teachers. If the gender gap by teacher is identified, this analysis will test if any classroom/teacher attributes can be found that predict a smaller classroom gender gap in terms of COR scores.

#### **Results:**

From the results of this analysis, we found that there were clearly gender gap differences among teachers; however, we could not find any significantly related classroom/teacher variables that could be used as predictors of this gender gap.

#### **Data:**

The pre and post COR scores were aggregated by teacher for the past 3 years. Only COR total was used in this analysis. We limited the analysis to only those teachers that had a minimum of 15 boys and 15 girls with matching pre and post COR scores over the last 3 years. After these minimums were set, we ended up with a total of 53 RECAP teachers in our sample. Tables IX-2 through IX-4 in the RECAP 2006-07 Statistical Supplement shows the 3-year COR aggregate scores for each of these 53 teachers. For anonymity purposes, the teacher names are not shown and are replaced by codes T1 through T53 in the tables.

**Analysis:**

In this analysis we tried to look for classroom variables that might be related to a classroom's boy-girl differences in COR scores. Regression analysis was used in this analysis. The dependent variable (predicted variable) in the regression was the difference in COR growth between boys and girls ("boys-girls: differences in growth" column) seen in Table IX-3 in the 2006-07 RECAP Statistical Supplement. The independent variables included: the teachers 2005-06 ECERS-R score, teacher's number of years of RECAP experience, and the student's mean age.

**Results:**

The F-value and r-squared value for the regression analysis was only 1.01 and .06 respectively. The regression analysis did not show any significant relationships between the gender gap variable and the independent variables. Additional results from this regression analysis can be seen in Table IX-1 in Appendix IX in the RECAP 2006-07 Annual Report Statistical Supplement.

**All of the detailed results of this analysis, including the actual data used, can seen in Tables IX-1 through IX-4 in Appendix IX in the RECAP 2006-07 Annual Report Statistical Supplement.**



## **X. Description of RECAP**

### Introduction

The Rochester Early Childhood Assessment Partnership (RECAP) was started in Rochester, New York in 1992 to address the growing need for understanding and improving the effectiveness of prekindergarten programs.

Today, with the support of childcare providers, local government, foundations and schools, RECAP has become responsible for the assessment of approximately two-thirds of Rochester's 4-year-olds, including its New York State Universal Prekindergarten program, and about one-quarter of Rochester's 3-year-olds.

RECAP provides an integrated process for ensuring that early childhood programs have the information they need for making informed decisions that can be used to improve program practices and outcomes.

RECAP provides useful data analysis on the status of our early childhood programs including:

- 1) Parent satisfaction, involvement and interest in child development, programs, agencies, and support services
- 2) Classroom observations of adult and child interaction, program function, and environment
- 3) Child-specific information on motor development, speech and language development, school skills, and socio-emotional adjustment

Confidentiality of all participants is maintained in all areas and is of the utmost importance to our partnership. This year RECAP assessed 2,694 children in 162 classrooms.

### **What early childhood providers participated in RECAP?**

- Action for a Better Community, Inc. Head Start
- Annie's Ark, Inc.
- Diocese of Rochester Catholic Schools in the City of Rochester
- Early Childhood Education Quality Council Centers
- Family Resource Centers of Crestwood Children's Center
- Monroe Community College Childcare Center
- Rochester Childfirst Network Family Child Care Satellites of Greater Rochester
- Rochester City School District Florence S. Brown Pre-School Program
- Rochester City School District Early Childhood and Elementary Schools
- Rochester City School District Rochester Preschool-Parent Program (RPPP)
- YMCA of Greater Rochester Child Care Centers



## Measure Distribution and Collection

RECAP operates throughout the school year. The partnership collects information, analyzes it, and disseminates it widely so parents, providers and policymakers can make informed decisions.

Three times during the year (fall, winter, and spring), Children's Institute staff members prepare packets of measures and distribute them to program locations for teachers and parents to complete. Also included in packets are detailed instruction sheets, timelines, and identification numbers for each child, sample letters, and schedules of upcoming meetings, training, and orientations.

Teachers complete the Teacher-Child Rating Scale and Child Observation Record and parents complete the Parent Child Rating Scale and the Parent Questionnaire in fall and spring. The Early Childhood Parent (Satisfaction) Survey and Family Involvement Questionnaire are distributed to obtain parent feedback about the programs and parental involvement in February.

Programs return completed measures to Children's Institute for processing. The measures are checked for accuracy and the data are entered. Individualized reports for each child and classroom are processed and returned to programs along with the original instruments within 7 to 10 days. Reports include individual child and group profiles of outcomes and parent feedback summaries. Reports may be used immediately by program staff members to identify strengths, needs, and to set goals for program, children, and families. Children's Institute staff members support program partners with interpretation of reports in individualized and small group meetings.

## Partner Development

Training and support is provided to directors, teachers, and parent support staff members on appropriate use of all measures used in the partnership. Specific descriptions of each segment are noted below.



## Orientation Sessions

The RECAP orientation sessions provide history and background on the partnership, an overview of the entire RECAP process, and training on use of its components. Partners gain perspective on the entire partnership and how this community-wide operation fits with their individual program. This forum also provides opportunity for early childhood program partners to link with each other.

The project coordinator meets frequently at program sites with teachers and directors. This personalized option was suggested during early focus groups and is preferred by most program staff members. These meetings complement information obtained at group orientations and are individualized to meet unique program needs.

## COR Training

Teachers participate in training to learn appropriate use of the Child Observation Record (COR) before they begin the formal child observation process. A three-hour session includes COR components, child observation techniques, and hands on training to learn documenting and scoring methods.

## Reports Interpretation Workshop

An integral component of the assessment is for partners to utilize the data to make informed decisions about their early childhood program practices. Individual and group sessions are provided to assist teachers, directors, and parent support staff members with the interpretation of individual or group profile reports, as well as classroom quality profiles.

## Introductory ECERS-R Training

Program staff members and providers are introduced to the ECERS-R in a three-hour training session. Participants learn observation and scoring techniques, and the benefits of using the ECERS-R in program assessment and quality improvement processes. They also review the logistics of the classroom/program observation.

## Master Observer Training

Master observers are selected on the basis of their experience in early childhood education, program observation, and interest to participate. Training includes a 15 hour program in the first year of involvement of a Master Observer. For observers beginning a second year and in all subsequent years, an additional four to 12 hours of training is required. Refinement of observation skills, inter-rater reliability standards, logistics of the observation process, observation guidelines, and protocol are covered in depth. Master observers are trained to attain and maintain a high level of inter-rater reliability. This year, four new master observers were trained in the ECERS-R.

## Training and Consultation Summary

- 34 program staff members participated in orientation activities.
- 21 prekindergarten teachers were trained in the COR.
- 23 program staff members were trained in the ECERS-R.
- 4 new ECERS-R master observers were trained.
- 23 ECERS-R master observers participated in refresher training.
- 12 program staff members attended reports interpretation workshops or individual sessions.
- 33 program staff members and partners attended 2005-06 Annual Report Findings presentations.

## Classroom/Program Observation Process

The observation process takes place over four months. Training for providers, teachers and directors is in January. Observations take place in February, March, and April.

In brief, the observation process is as follows:

- An observer contacts the classroom teacher/provider to schedule the observation date
- Program observation occurs (3 to 6 hours)
- Observer conducts an 30-45 minute interview with the teacher/provider immediately after the observation to obtain information not evident during observation
- Observer completes the score sheet and submits it to Children's Institute for processing
- Project coordinator reviews the score sheet for accuracy
- Score sheet is checked again for accuracy by a data clerk, the information is entered into the database and a summary report is produced
- Copy of original score sheet and summary report is mailed directly to teacher/provider
- Teacher/provider reviews information
- If teacher/provider disagrees with any item(s) in the report and wants to address this, he or she requests a collaborative review process (outlined below)

## Collaborative Review Request Procedure

- 1) After an observation is complete, the independent observer returns the completed score sheet to Children's Institute for processing. A copy of the score sheet and summary report is returned directly to the teacher/provider along with a cover letter that serves as a guide in their review of the report. In this letter is an invitation to contact the project coordinator if he or she feels a score does not accurately represent the program.
- 2) If a teacher/provider questions any item(s) and wishes to formally address this, he or she contacts the project coordinator to obtain a Collaborative Review Request Form in which to outline the details of the item(s) in question with additional supporting information.
- 3) Upon receipt of the Collaborative Review Request, the project coordinator reviews the information provided by the teacher/provider, consults the independent observer who completed the observation, and conducts a detailed re-examination of each quality indicator score. After consideration from these references, a determination is made whether any items may be scored differently.
- 4) In a detailed letter to the teacher/provider, the project coordinator formally addresses each questioned item and whether the item's score has been changed. A revised copy of the score sheet is returned with any applicable adjusted scores as well as a new summary report.
- 5) The revised scores are entered into the database.
- 6) If the teacher/provider informs us that he or she remains dissatisfied with the results of the process thus far, we will make arrangements for a second independent observer to conduct a second complete observation and submit a formal report.

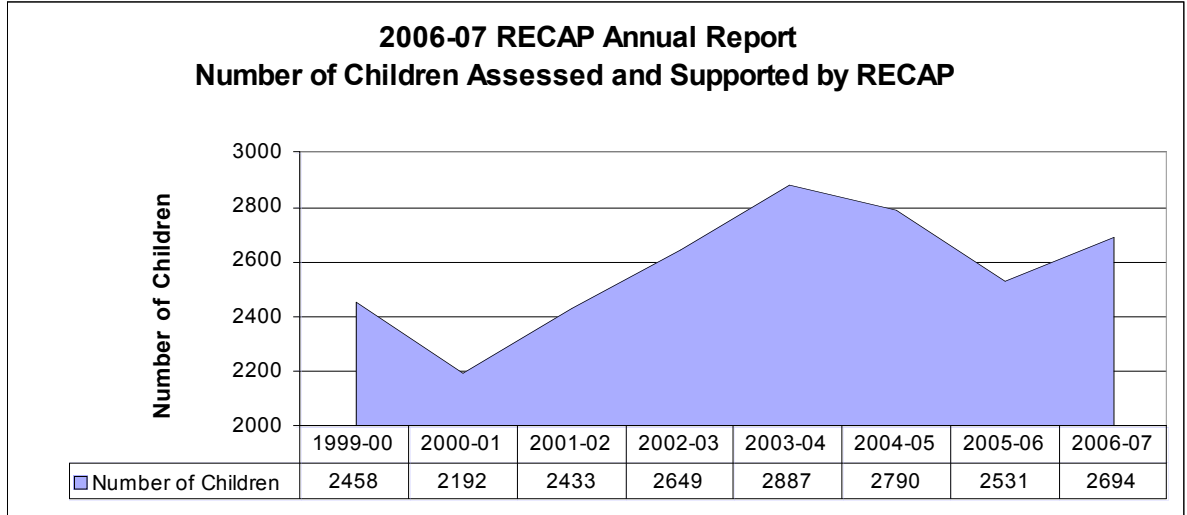
<b>Table X-1</b>						
<b>Summary of ECERS-R Collaborative Review Requests</b>						
<b>Summary of Results</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>
Number of reviews	24 out of 117	18 out of 130	23 out of 137	16 out of 128	15 out of 128	7 out of 127
Percent	21%	14%	17%	13%	12%	6%
Total number of items reviewed	140	71	152	129	86	39
Total number of items changed	76	28	69	60	49	14
Average change in overall score	0.2	0.1	0.2	0.2	0.2	0.2
Range of changes in overall score	0.0 - 0.5	0.0 - 0.4	0.0 - 0.9	0.0 - 0.8	0.0 - 0.4	0.0 - 0.3

<b>Table X-2</b>			
<b>Summary of FDCRS Collaborative Review Requests</b>			
	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>
Number of reviews	4 out of 54	2 out of 22	0 out of 14
Percent	7%	9%	-
Total number of items reviewed	30	12	-
Total number of items changed	5	8	-
Average change in overall score	0.1	0.2	-
Range of changes in overall score	0.0 - 0.2	0.1 - 0.3	-

## Statistical History of RECAP

Figures X-1 and X-2 shown below display the number of children and classes that RECAP has assessed and supported over the last 8 years.

**Figure X-1 Eight year history of the number of children assessed and supported by RECAP.**



**Figure X-2 Eight year history of the number of classes assessed and supported by RECAP.**

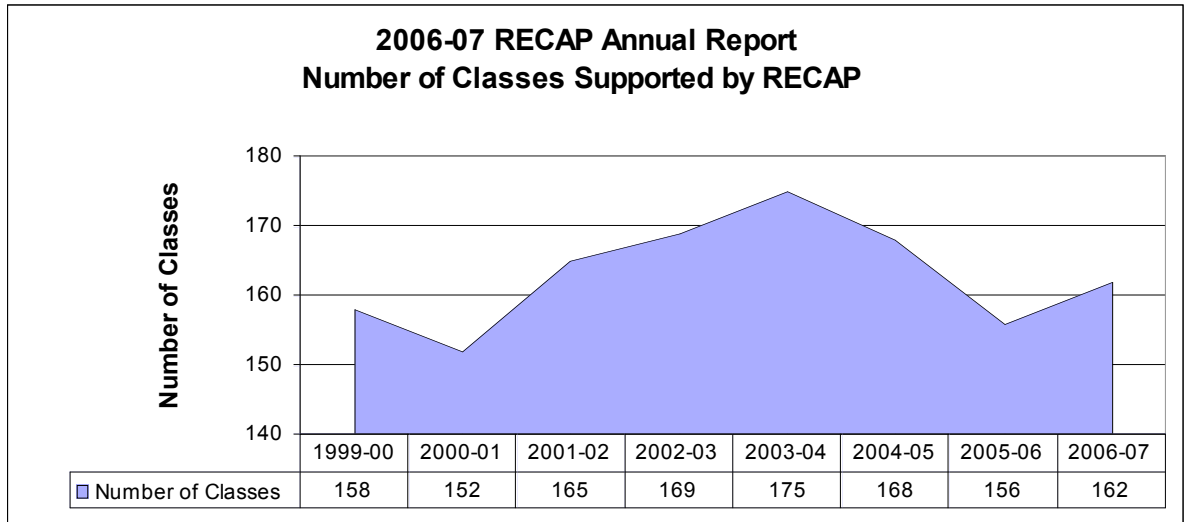


Table X-3 below shows the age breakdown of RECAP students. Age is calculated as of December 1 of the fall semester.

**Table X-3 Demographics for RECAP children.**

<b>Table X-3</b>				
<b>2006-07 RECAP Annual Report</b>				
<b>Demographic Information for Children in RECAP Classes for the Last 2 Years</b>				
	<b>2005-06</b>		<b>2006-07</b>	
<b>Age</b>	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
2	20	0.8%	27	1.0%
3	595	23.9	690	26.3
4	1855	74.7	1904	72.5
5	15	0.6	6	0.2
6	0	0.0	0	0.0
Total	2485	100.0	2627	100.0
Age Missing	46		67	
<b>Race/Ethnicity</b>	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
White	340	13.9%	392	15.1%
Black	1505	61.7	1509	58.2
Native American	1	0.0	5	0.2
Asian	37	1.5	36	1.4
Hispanic	469	19.2	498	19.2
Other	87	3.6	151	5.8
Total	2439	100.0	2591	100.0
Race/Ethnicity Missing	92		103	
<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
Male	1284	50.7%	1418	52.6%
Female	1247	49.3	1275	47.3
Total	2531	100.0	2693	100.0
Gender Missing	0		1	



## **XI. New York State Efforts**

This year RECAP expanded to Chemung County, New York with trainings and classroom observations using the Early Childhood Environment Rating Scale – Revised (ECERS-R).

Contributing partners include the Chemung County School Readiness Project-Readiness Council and Lead Agencies, Chemung County Child Care Council, Elmira City School District, Elmira Heights School District, Economic Opportunity Program of Chemung County/Child Development Head Start and Horseheads Central School District.

Four new Master Observers from Chemung County were trained to use the ECERS-R. Participants traveled to Rochester for a full day training at Children’s Institute and returned again for two-day field trainings; observing classroom programs followed by in-depth debriefing sessions with the Master Trainer/Project Coordinator.

The classroom observations process took place over five months beginning with Introductory ECERS-R Training in January for 60 teachers and directors. Two three-hour training sessions were provided. Forty-three (43) preschool classrooms were observed by both Rochester Master Observers and Chemung County Master Observers during the months of March, April, May and June.

Planning has moved forward for Year 2 (2007-08). Activities will include observation of approximately 48 preschool classrooms, Introductory ECERS-R training and 4 additional participants in Master Observer Training.

Additionally, work has begun in Year 2 to assess child outcomes in school district kindergarten classrooms using the Teacher-Child Rating Scale (T-CRS), Child Observation Record (COR) and Parent Appraisal of Children’s Experiences (PACE).



Presentations and Publications  
2006-07  
Rochester Early Childhood Assessment Partnership

**Hightower, A.D., MacGowan, A., and Brugger, L. (2006).** *RECAP - A Community-wide early childhood education assessment partnership.* Presentation to the Chemung County School Readiness Project Council, Elmira, N.Y.

**Gramiak, W., Brugger, L., Van Wagner, G., Hightower, A. D., (August, 2007).** Chemung County School Readiness Project: *Prekindergarten Assessment Community Report.* 2006-07 ECERS-R Results

## RECAP 2006-07 Annual Report Statistical Supplement

A separate RECAP report has been prepared which contains the detailed information that has formerly been included in Appendices A through D of the main RECAP Annual Report.

Additional appendices are also included in this supplement which provides more detail on many of the topics that are introduced in the main RECAP report. *Please note that for the appendices with Roman numerals, the numerals match the section numbers in the main report from where these appendices are referenced.*

The title of the supplement is: “**RECAP 2006-07 Annual Report Statistical Supplement**” and the report number is T07-002. It can be accessed on the Children’s Institute web site on: [www.childrensinstitute.net](http://www.childrensinstitute.net).

This supplement report includes:

<b>Appendix</b>	<b>Topic</b>
A	ECERS-R
B	ECPS/Satisfaction
C	ECERS-R for UPK
D	ECPS/Satisfaction for UPK
I	ECERS-R Additional Results
II	Children’s Outcomes – Additional Information
III	Parent Perspectives – Family Involvement Questionnaire
VI	Pre-K Children with Disabilities
VII	Children’s Health Information (CHI 2.0)
VIII	Family Support
IX	Gender Gap Data Analysis
XII	Reliability Statistics for RECAP Measures

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