ROCHESTER EARLY CHILDHOOD ASSESSMENT PARTNERSHIP
2004-2005 EIGHTH ANNUAL REPORT

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Rochester Early Childhood Assessment Partnership
Annual Report 2004-2005

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 (later joined by parochial schools), higher education, local governments and others. RECAP's purpose has been to address the need for understanding and improving the effectiveness of prekindergarten programs. Today, with public and private support of early childcare 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 and interests 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 2004-2005:

- Action for a Better Community, Inc. Head Start
- Charles Settlement House
- Diocese of Rochester Catholic Schools in the City of Rochester
- Early Childhood Education Quality Council Centers
- Family Resource Centers of Rochester
- Monroe Community College Childcare Center
- Rochester Children's Nursery Family Childcare Satellite Network
- 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 Pre-K Pupils Served by RECAP in 2004-2005:

2,790 students and 168 classrooms participated this year, compared to 2,887 students and 175 classrooms last year and 2,649 students and 169 classrooms two years ago.

There were 670 three-year-olds this year, compared to 774 last year, and 524 two years ago.

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;" a 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 academic, social, and motor skills is 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^{th} 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 excellent alpha-reliabilities ranging from 0.85 to 0.94. To ensure the inter-rater reliability of the ECERS-R observation, 20 classrooms (roughly 16% 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 = 0.98 (n=20 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 .95 for differences of one point.

3. Results on Classroom Quality

Classrooms assessed by RECAP were of high to very high quality; the ECERS-R mean and median score was 5.8. The average ECERS-R quality of classrooms across the United States is 4.3, so RECAP was about 1.5 standard deviations above the national average, or at the 93rd percentile.

Of the 168 classrooms:

- Only 12% of the classrooms were rated below a 5.0;
- 42% scored between 5.0 and 6.0;
- 46% (about half) of the classrooms had scores of 6.0 or above.
- In other words, 88% – more than 44 classrooms out of every 50 – are at or above accepted standards for high performing classrooms.

(Note: There were a total of 168 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 40 teachers had 2 classroom sessions, a total of 128 classroom sessions were assessed this year.

Over the past 5 years, high classroom quality level has been maintained; however, the total ECERS-R mean score has dipped over 2 years from 6.2 in 2002-03 to 5.8 this year. There is a systemic downward trend: only two programs scored higher this year than last year. Otherwise put, 9 out of 11 programs showed a decrease in quality which should be of concern to providers and the community.

Teaching experience: A special analysis was conducted this year to determine the relationship between ECERS-R scores and years of RECAP teacher experience. We found that teachers with 6 or more years of experience have higher ECERS-R scores by 0.6 in total compared to the teachers with fewer than 6 years of experience. RECAP had 15 new teachers/classrooms over the last 2 years; it may take several years to raise the ECERS-R scores for these new teachers/classrooms.

4. Results on Student Performance in Academic, Social and Motor Skills

Over 94% of Pre-K pupils grew at or above their expected developmental trends in the COR; this is consistent with previous years. More than 80% of the students had COR change scores above developmental expectations. Only a small percentage of students show "negative growth." This is comparable to previous years.

Based on the COR observations, there were no detectable differences in growth or performance among Black, Hispanic or White pupils. This is a similar result to last year (2003-2004) and other years, where there were no academic, motor, or social differences in growth or performance among these three main racial/ethnic groups in Rochester. Note that this phenomenon does sometimes change from year to year; as teachers attest, each entering class has its own set of characteristics. This report marks the eighth year that

RECAP has evaluated the performances of Pre-K pupils disaggregating by race/ethnicity and gender. In three of those eight years (1998-99, 99-00, 00-01), White students grew at higher rates in academic skills as compared to Black and Hispanic students. In 1997-98, 2002-03, 2003-04, and 2004-05, all three groups grew at comparable rates in all three domains.

There were also no detectable differences in growth or performance among boys and girls this year. This has been true now for the last 2 years.

Like last year, this year there is a small positive, significant relationship between ECERS-R scores and child growth in COR scores. Also like last year, there were no significant relationships between high and very high quality classroom environments and student performance as measured by the average growth in the COR. This may be the result of so many classrooms at very high levels of performance.

5. Results in Socio-Emotional Risk Factors

Nearly one child in eight – 13% of the students – presented multiple socio-emotional risk factors at entrance into preschool in the fall of 2004 (e.g., students below the 15th percentile on the T-CRS).

Students who entered preschool with multiple socio-emotional risk factors were rated by their Pre-K teachers as lower in academic, motor and social skills than their peers who were not at risk.

Ten percent of the students who initially presented no socio-emotional risk factors presented one (6%) or multiple (2%) risk factors at the end of the academic year.

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

The initial classification of students with a single risk factor changed. By the end of the academic year, 63% of the students classified with a single risk factor improved and had no detectable socio-emotional risk factors; 21% remained the same; and 16% presented multiple socio-emotional risk factors. Last year, only 8% of these students presented multiple socio-emotional risk factors.

As in previous years, a slight majority of students who started initially with multiple risk factors continued to have multiple risk factors at the end of the year. More specifically, 50% of students with multiple socio-emotional risk factors remained in that category at the end of the academic year. But, conversely, 50% did move out of this category, with 18% improving to one risk by spring, and 32% improving dramatically to no risks by the spring.

This year, we found that there was no correlation between the ECERS-R score and the percentage of students with socio-emotional risk factors who improved. A small positive correlation found last year was not replicated.

6. Results in Parental Perspectives

Overall, parents remain very satisfied with their children's prekindergarten programs. 94% rated the programs above a "B" (good), and 67% of parents rated their child's program with an "A" grade.

There were no major differences between last year and this year in rates of overall parental satisfaction with the program. However, the percentage of ratings that were an "A" grade did increase to 67% from 64% last year. Two years ago, this "Excellent-A" percentage was 61%.

The "Parent Questionnaire" is a survey that RECAP distributes to parents each year. It asks questions that fall into 3 major areas. These 3 areas concern child learning, parent learning styles, and parent needs topics. The responses to this survey could be interpreted as direct feedback of the parents to their programs. Based on this year's results, we can see that the following topics were of the most importance to the parents:

- For the child to learn to be successful in school
- For the child to learn to get along with other children
- For the child to learn to work with a teacher
- For the child to share and take turns
- For the child to think for himself/herself

7. Training & Consultation

- 10 program staff members participated in orientation activities.
- 50 prekindergarten teachers were trained in the COR.
- 48 program staff members were trained in the ECERS-R.
- 5 new ECERS-R master observers were trained.
- 19 ECERS-R master observers participated in additional training.
- 16 program staff members attended reports interpretation workshops.
- 15 program staff members and partners attended 2003-2004 Annual Report Findings Presentations.
- 6 new FDCRS master observers were trained.
- 33 family childcare providers participated in Introductory FDCRS Training.

8. Parent Involvement and Child Outcomes

For the past several years, in addition to student classroom attendance, attendance of parents in a variety of program activities was collected for a majority of RECAP programs. This year analyses were performed to determine if relationships exist between parent involvement and the performance of the children.

By performing a cluster analysis on the parent attendance data, three distinct categories of parent involvement were detected. This finding was consistent over the last 2 school years. These groupings for parents included "Group Involvement," "Classroom Involvement," and "Low Involvement." For all RECAP programs combined, 59% of the parents were categorized as the "Low Involvement" type, 27% were "Group Involved" and 15% were "Classroom Involved."

One finding was that growth in the COR academic skills was significantly related to the parenting involvement type. The "Group Involvement" type of parents had children who grew, on average, 1.13 in the academic COR subscale compared to "Low Involvement" parents whose children grew only 0.99.

In addition to this parent involvement study, an attrition analysis was completed by comparing a group of students (and their parents) who stayed in their classroom all year with a group that transitioned out during the year. It was found that the two groups could not be distinguished by the parent involvement type alone. The parents of both groups had very similar involvement patterns. However, the students who stayed in the classroom all year had significantly higher pre COR and T-CRS scores when compared to the group that left early. The group that stayed all year also had significantly higher student attendance rates.

9. Family Childcare

This year, RECAP moved forward and further involved family childcare providers. Assessment of family childcare is a key outcome for RECAP motivated by community investment and interests. Currently, 54 family childcare providers are participating in RECAP. The FDCRS scores this year averaged 5.4 which can be categorized as "Good" quality.

10. Pre-K Children with Disabilities

An analysis on Pre-K students with disabilities was completed and done in partnership with the Rochester City School District's (RCSD) Department of Research, Evaluation and Testing, the Department of Early Childhood Education. Among the findings was that nearly 75% 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 do make commensurate gains similar to the general education student.

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 1,718 children in 2004-2005 (62% of all RECAP students). The CHI was most often completed by the child's mother (86%).

The following are some highlights: A large portion, 31% of entering Pre-K pupils, have never visited a dentist (38% last year); asthma rates are very high, with 18% of the pupils' physician reporting asthma; 12% of entering Pre-K pupils having been hospitalized for asthma in the past year; and approximately 28% of the parents are concerned enough about other specific problems to suggest that their children are in need of additional services.

Linking CHI Health Data Directly with Children's Outcomes. An analysis was once again conducted this year using the CHI and RECAP outcomes data. The objective of these analyses were to examine links, if any, between parents' answers on the CHI form and students' performance in the COR and T-CRS measures. This year we found that if a student had certain problems that were reported by the parent in their CHI responses, that these responses were predictive of lower COR scores and a higher number of T-CRS risk factors for the student. Some of the problems that were found to be related included:

- Behavior control problems
- Asthma as diagnosed by a doctor
- Iron deficiency
- Ear infections
- Or those involved in early intervention services

12. Follow-up Study

Follow-up of RECAP students – Again this year, RECAP compared the 2004-2005 kindergarten performance of students who participated in 2003-2004 RECAP pre-k programs with students who did not attend RECAP programs. The RCSD 2004-2005 kindergarten COR scores were used. We found that the 2003-2004 RECAP students had significantly higher 2004-2005 fall and spring kindergarten COR scores than non-RECAP students. This finding has now repeated for the 2 consecutive years that the study has been performed. Of special note this year, involvement in RECAP pre-k programs seems to work the same for all students. Gender and race/ethnicity did not have a significant impact, when tested in combination with the RECAP/non-RECAP effect.

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, the 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., Catholic Diocese of Rochester, Charles Settlement House, Children's Institute, Early Childhood Education Quality Council Centers, Family Resource Centers of Rochester, Florence S. Brown Pre-K Center, Monroe Community College Childcare Center, Rochester Children's Nursery Family Childcare Satellite Network, 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 Julia Guttman, Lori VanAuken, Marcia Winter, plus the creative staff of Children's Institute, for their contributions to RECAP and this report. Staś Lotyczewski of Children's Institute was especially helpful in the development of this year's 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.

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 1970's, 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 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/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. For observers beginning a second, third or fourth year of training, an additional four to five hours of training are required. In addition to in-depth training for refinement of observation skills and reliability, logistics of the observation process, observation guidelines, and protocol are carefully reviewed.

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, 20 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 0.92. The inter-rater reliability was r = 0.98 (n=20 dual observations). Using (a/a+d; a=agreement and d=disagreement) the median inter-rater reliability was 0.88 for exact matches and 0.95 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 1 shows the inter-rater reliability of ECERS-R total score and subscales.

Inter-rater reliability (r) of ECERS-R Total Score and Subscales for 2004-2005

Scale	Inter-rater reliability (r)
Space	0.95*
Routine	0.95*
Language	0.98*
Activities	0.98*
Interaction	0.97*
Program Structure	0.84*
Parent and Staff Development	0.89*
Total ECERS-R Score	0.98*
Sample N	20

* Significant at p<.0001

Table 1 Inter-rater reliability of ECERS-R subscales

We have included a complete 4-year history of reliability statistics for RECAP measures plus a 5 year history of ECERS-R inter-rater reliability in Appendix H of the RECAP Statistical Supplement. This document is entitled: "Rochester Early Childhood Assessment Partnership 2004-2005 Eighth Annual Report, Statistical Supplement." It is further identified as T05-003 and can be downloaded from the Children's Institute web site (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 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 prekindergartens 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 1 shows the mean ECERS-R score for RECAP and other studies.

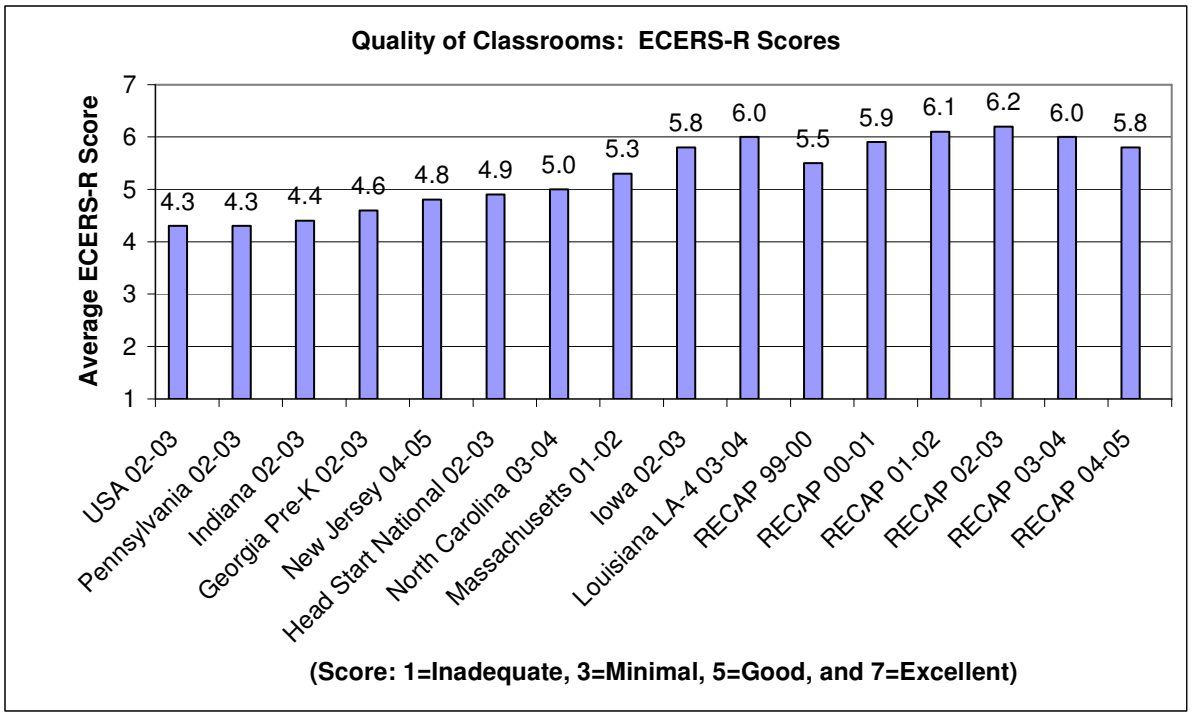


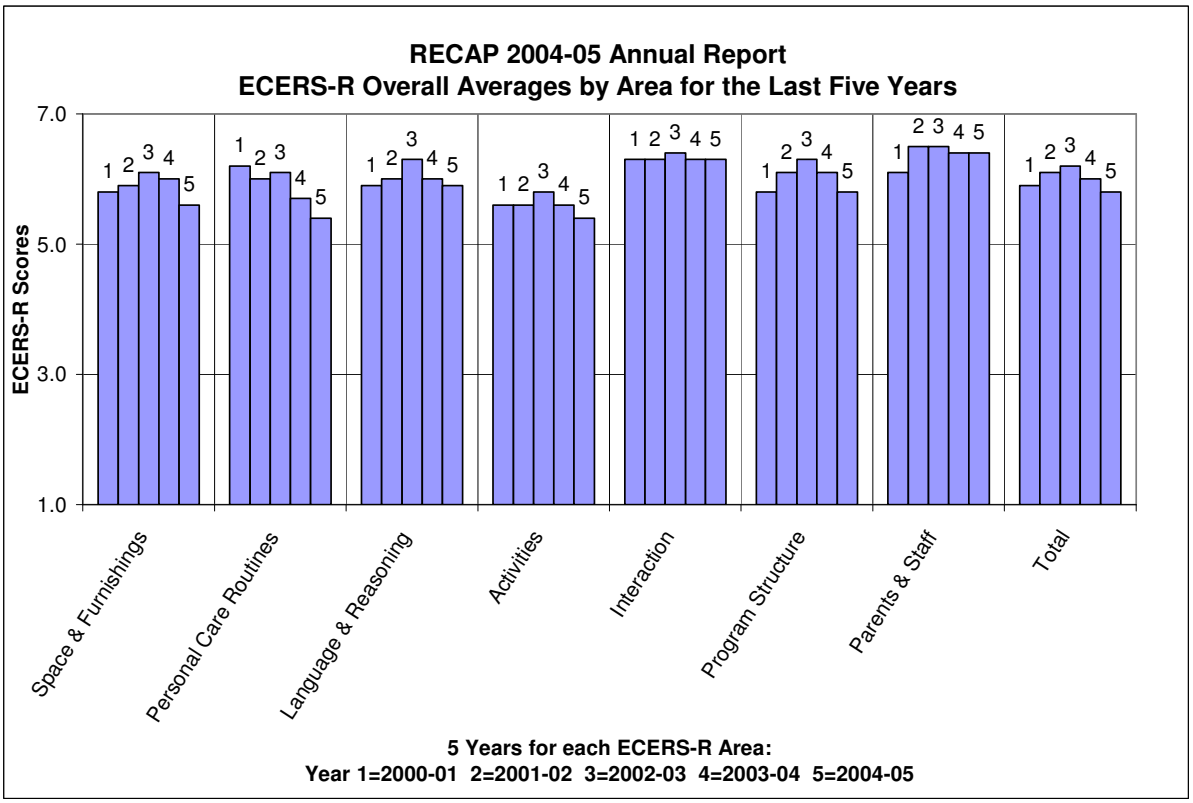
Figure 1 Quality of Rochester Formal ECE System

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 1.5 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 Rochester's Formal ECE improving?

This year the mean and median ECERS-R score for RECAP classrooms was 5.8. As shown in figure 1, over the past 5 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 three years is approaching the maximum possible score of the scale, somewhat limiting our ability to measure improvement. The dip in the overall ECERS-R mean score, from 6.0 to 5.8 in the past year, will be addressed later in this chapter.

Figure 2 below shows the mean scores by area and by year.



		Area							
School Year	Year	Space & Furnishings	Personal Care Routines	Language & Reasoning	Activities	Interaction	Program Structure	Parents & Staff	Total
2000-01 (n=116)	1	5.8	6.2	5.9	5.6	6.3	5.8	6.1	5.9
2001-02 (n-=118)	2	5.9	6.0	6.0	5.6	6.3	6.1	6.5	6.1
2002-03 (n=128)	3	6.1	6.0	6.3	5.8	6.4	6.3	6.5	6.2
2003-04 (n=137)	4	6.0	5.7	6.0	5.6	6.3	6.1	6.4	6.0
2004-05 (n=128)	5	5.6	5.4	5.9	5.4	6.3	5.8	6.4	5.8

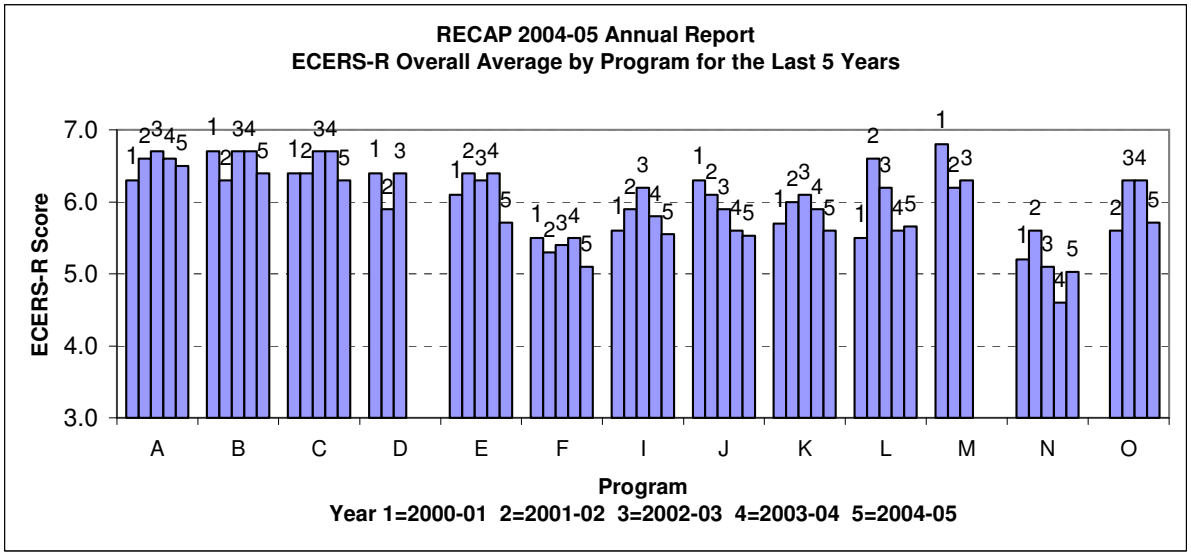
Figure 2 ECERS-R Overall Averages by area and by year

It can be seen in Figure 2 that ECERS-R scores for 4 areas have been either steadily increasing or stable over a five year period. Space and Furnishings, Personal Care Routines and Activities areas have decreased over the past 5 years. These decreases will be addressed later in this chapter.

Figure 2 shows the mean ECERS-R scores were based on a sample of 128 observations in 2004-2005. Please note that there were actually 168 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 40 teachers had 2 classroom sessions, a total of 128 classroom sessions were assessed this year.

Are individual programs maintaining high quality?

Yes, but quality seems to be slipping. Figure 3 below shows that programs are maintaining high quality, but not very high quality. All programs that initially had average quality above a score of five (good quality) have been able to improve or maintain their quality. In addition, three out of four of the programs that initially had quality slightly lower than a score of five quickly improved and maintained those improvements for four consecutive years. However, there is a systemic downward trend: only two programs scored higher this year than last year. Otherwise put, 9 out of 11 programs showed a decrease in quality which should be of concern to providers and community. (Please note that programs letter D and M in figure 3 are no longer independent programs. The classrooms for these programs were assimilated into other existing programs 2 years ago.)



ECERS-R Overall Average by Program for the Last 5 Years																
				Program												
School Year	Average Total	n	Year	A	B	C	D	E	F	I	J	K	L	M	N	O
2000-01	5.9	116	1	6.3	6.7	6.4	6.4	6.1	5.5	5.6	6.3	5.7	5.5	6.8	5.2	
2001-02	6.1	118	2	6.6	6.3	6.4	5.9	6.4	5.3	5.9	6.1	6.0	6.6	6.2	5.6	5.6
2002-03	6.2	128	3	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	4	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	128	5	6.5	6.4	6.3		5.7	5.1	5.6	5.5	5.6	5.7		5.0	5.7

Figure 3 ECERS-R Overall Averages by program and by year.

Are there explanations for the overall decrease in scores in the past two years?
It can be seen in Figure 1 that from 1999-00 through 2002-03, there were 3 straight years of small increases in the RECAP ECERS-R scores. The last 2 years show small decreases (6.2 to 6.0 to 5.8).

Just as we want to learn about reasons for an increase in quality, we must be curious about possible reasons for decreases. We have studied some factors which may have contributed to this decline. These factors will also be the subject of continued investigation in future years.

T-Tests on group differences show that the one-year changes in ECERS-R scores were generally not significant, either this year or last year. These one-year changes can be seen in Tables 3 and 4 in Appendix I in the RECAP 2004-2005 Statistical Supplement. There was only one area in each year that had a significant 1-year change. For this year the "Space and Furnishings" area had a significant 1-year change (Table 3). Last year the "Personal Care Routines" area had a significant change (Table 4). However, in Table 2 below we can see that the 2-year changes from 2002-03 to 2004-05 are significant for 6 out of 7 areas. The total ECERS-R has dipped over 2 years from 6.2 in 2002-03 to 5.8 this year (Table 2).

Table 2 ECERS-R Two year differences from 2002-03 to 2004-2005

ECERS-R 2-Year Differences Between 2002-03 and 2004-05 Including t-Tests for 2 Year Differences							
	----------2002-2003----------			----------2004-2005----------			Differences between cohorts
Area	n	Mean	Standard Deviation	n	Mean	Standard Deviation	Difference
Space and Furnishings	128	6.1	0.8	128	5.6	0.9	**-0.5***
Personal Care Routines	128	6.0	1.0	128	5.4	1.3	**-0.6***
Language and Reasoning	128	6.3	1.1	128	5.9	1.1	**-0.4***
Activities	128	5.8	1.0	128	5.4	1.1	**-0.4***
Interaction	128	6.4	1.0	128	6.3	1.0	-0.1
Program Structure	128	6.3	1.1	128	5.8	1.3	**-0.5***
Parents and Staff	128	6.5	0.6	128	6.4	0.7	-0.1*
Total	128	6.2	0.7	128	5.8	0.8	**-0.4***
Note: * t-Test significant at Pr (t) <=.05							

The most obvious reason for a decrease in score is the real possibility that programs' quality has decreased. Directors and teachers may not be attending to quality rubrics. Another possible reason for the decrease in ECERS-R scores is that there continues to be more stringent requirements in scoring. The authors of the ECERS-R regularly update their resource information with "Notes for Clarification." These "Notes for Clarification" are designed to help assessors and program staff members more clearly specify how quality indicators must be satisfied to receive a positive rating. To keep the RECAP assessment system current with the authors of the ECERS-R, we regularly incorporate the updates into our observation process. Master Observers are provided this information which is to be used

in their observation process and it is reviewed in their annual training. Additionally, every teacher and program director receives a copy of the updates every year.

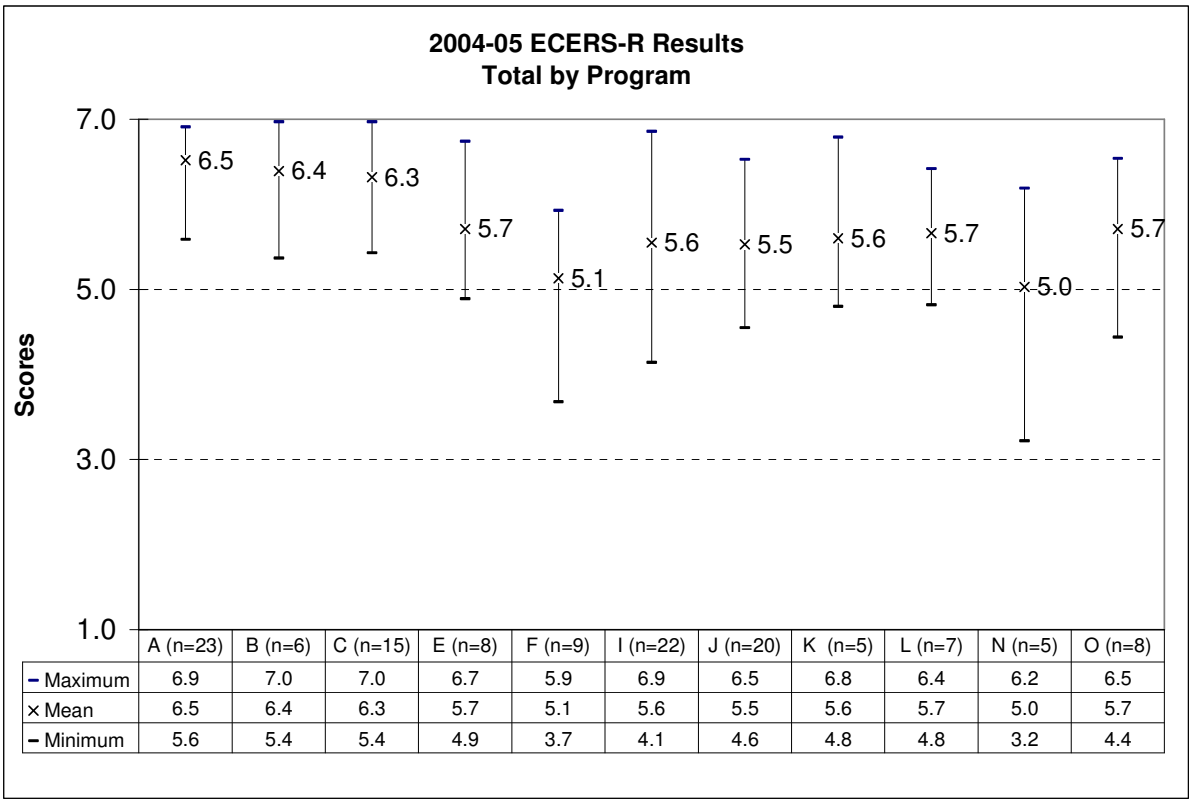
As an example, over the past 2 or 3 years, items within "Personal Care Routines" have become more specific in the requirements necessary to meet the criteria for these "sanitary related items." These items include: hand washing procedures, sanitary practices, and the required tracking and documentation of these occurrences by observers. The 0.6 drop in "Personal Care Routines" over the last 2 years (Table 2), that was highlighted earlier, may be due to these more stringent interpretations.

Teaching experience and ECERS-R - An additional analysis of ECERS-R scores in relation to teaching experience was conducted this year. This analysis is fully described at the end of this chapter. We found that teachers with 6 or more years of experience have higher ECERS-R scores (mean=6.3) by 0.6 in total compared to the teachers who had fewer than 6 years of experience (mean=5.7).

Considering that we had 15 new teachers/classrooms added in RECAP over the last two years it may take several years to bring up the ECERS-R scores for these new teachers/classrooms.

ECERS-R scores are capped at 7.0 - To repeat an earlier observation, the ECERS-R scale only goes up to 7.0, and as RECAP classrooms approach this cap ("restriction of range"), it becomes increasingly difficult to show yearly increases in scores. Whether the overall RECAP average ECERS-R score is 6.2 (2 years ago), or 5.8 (this year), it is still at a high quality level.

What is the Quality of Individual Classrooms this Year?



	A (n=23)	B (n=6)	C (n=15)	E (n=8)	F (n=9)	I (n=22)	J (n=20)	K (n=5)	L (n=7)	N (n=5)	O (n=8)
– Maximum	6.9	7.0	7.0	6.7	5.9	6.9	6.5	6.8	6.4	6.2	6.5
× Mean	6.5	6.4	6.3	5.7	5.1	5.6	5.5	5.6	5.7	5.0	5.7
– Minimum	5.6	5.4	5.4	4.9	3.7	4.1	4.6	4.8	4.8	3.2	4.4

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	1	0	0	0	0	1	0	2	1.6%
4-4.9	0	0	0	1	2	5	1	1	1	1	1	13	10.2%
5-5.9	2	1	4	4	6	10	15	3	4	2	3	54	42.2%
6-6.9	21	4	10	3	0	7	4	1	2	1	4	57	44.5%
7.0	0	1	1	0	0	0	0	0	0	0	0	2	1.6%
Total	23	6	15	8	9	22	20	5	7	5	8	128	100.0%

Figure 4 2004-2005 Quality of individual classrooms

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

1) No classrooms scored lower than minimum standards (a score below 3).
2) 12% of the classrooms scored between minimum standards and good quality (score of 5).
3) 88% of the classrooms had at least good quality (score of 5 and above).
4) 46% of the classrooms had quality at or above a score of 6.
5) Most programs have very few classrooms (12%) below a 5.

6) Programs A and C, as examples, have excellent homogenous exceptionally high quality although they have a relatively large number of classrooms (n=23 and n=15 respectively).

7) The majority of students attending classrooms assessed within RECAP were in "good" to "excellent" quality classroom environments.

Combining the information of Figures 3 and 4 we can conclude:

1) Some programs have a large number of classrooms and excellent quality for years. In particular, program A has 23 classrooms and has an impressive average of 6.6 with a high level of uniform quality. Program C has similar results. More importantly, that average uniform level of quality has been maintained for five years. Therefore, it is possible to have large programs serving urban preschool children with consistent high quality.

2) Smaller programs also have maintained good quality classrooms for the last three years.

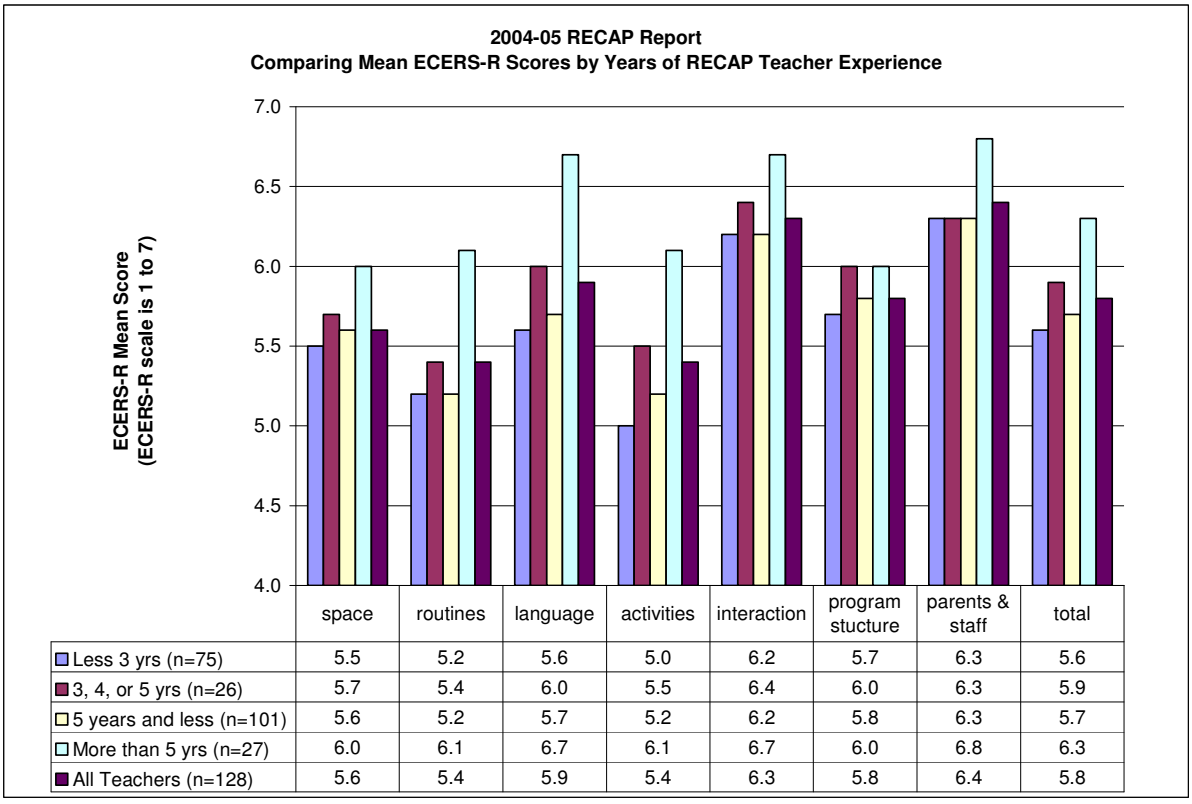
Over the years RECAP evaluations have repeatedly demonstrated the wisdom, "One size does *not* fit all." Different programs work for different children and families in different ways. There remains one high standard, but the various and diverse RECAP-affiliated programs and schools are required to fit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

That we observe both large and small programs providing consistently high quality demonstrates that we can enjoy one size not fitting all, and not at the expense of quality.

Appendix A, in the RECAP 2004-2005 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 Supplement.

ECERS-R Scores Related to RECAP Teaching Experience

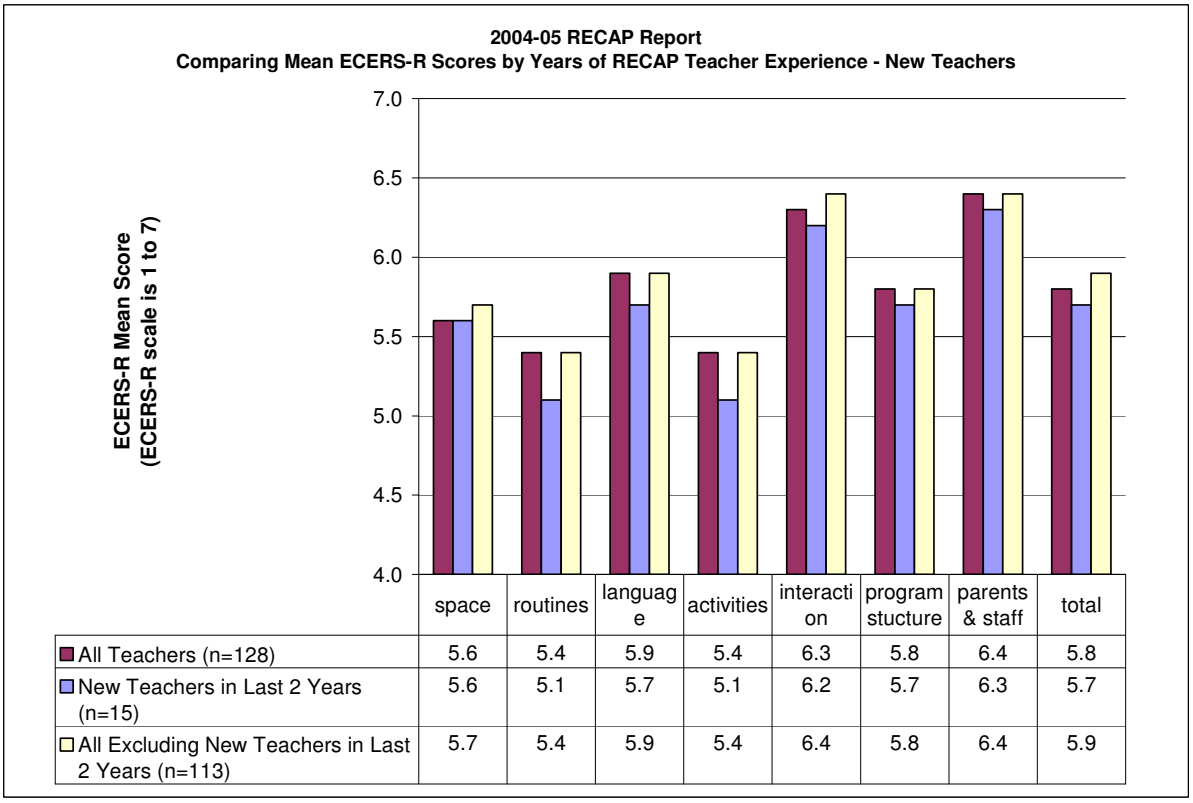
A special analysis was conducted this year to determine the relationship between ECERS-R scores and years of RECAP teaching experience. We can see in Figure 5 below that teachers with 6 or more years of experience have higher ECERS-R scores (mean=6.3) by 0.6 in total compared to the teachers who had fewer than 6 years of experience (mean=5.7).



	space	routines	language	activities	interaction	program stucture	parents & staff	total
Less 3 yrs (n=75)	5.5	5.2	5.6	5.0	6.2	5.7	6.3	5.6
3, 4, or 5 yrs (n=26)	5.7	5.4	6.0	5.5	6.4	6.0	6.3	5.9
5 years and less (n=101)	5.6	5.2	5.7	5.2	6.2	5.8	6.3	5.7
More than 5 yrs (n=27)	6.0	6.1	6.7	6.1	6.7	6.0	6.8	6.3
All Teachers (n=128)	5.6	5.4	5.9	5.4	6.3	5.8	6.4	5.8

Figure 5 Comparing ECERS-R scores in 2004-2005 for teachers by years of experience

Figure 6 below shows the impact in this year's ECERS-R scores, for teachers who were new to RECAP during the last 2 years.



	space	routines	language	activities	interaction	program stucture	parents & staff	total
All Teachers (n=128)	5.6	5.4	5.9	5.4	6.3	5.8	6.4	5.8
New Teachers in Last 2 Years (n=15)	5.6	5.1	5.7	5.1	6.2	5.7	6.3	5.7
All Excluding New Teachers in Last 2 Years (n=113)	5.7	5.4	5.9	5.4	6.4	5.8	6.4	5.9

Figure 6 Comparing ECERS-R scores in 2004-2005 for RECAP teachers who were new to RECAP during the last 2 years

Tables 5 through 7 in Appendix J of the RECAP 2004-2005 Statistical Supplement show additional results from comparing ECERS-R scores for teachers with different number of years experience in RECAP classrooms. In general, we observe that teachers with 3 or more years of experience have higher ECERS-R scores by 0.5 in total compared to the teachers who had fewer than 3 years. There were significant differences in all areas except in "program structure."

CHILDREN'S OUTCOMES

COR - Student Performance: Academic, Motor, and Social Skills

How did we measure students' academic, social, and motor 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 record their observations of children's functioning for 32 items. Children's acquisition of skills is measured on a five-point developmentally sequenced scale with each point representing a level of children's growth along the developmental continuum. The COR items form three empirically derived scales: academic, motor and social (Fantuzzo, Hightower, Grim, Montes, 2002). The new COR 32 version was used this year for the first time.

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, the RECAP staff trained 31 prekindergarten teachers and teacher's assistants on the COR.

The COR has three empirical subscales, (Fantuzzo et al, 2002):

Empirical Scales	**Item Examples**
1. Cognitive or Academic Skills	"Reading"
2. Coordinated Movement	"Moving to music"
3. Social Engagement	"Relating to other children"

The alpha reliability (internal consistency) of the COR subscales were:

- 0.89 (n=2,063) for COR Academic
- 0.85 (n=2,125) for COR Motor
- 0.91 (n=2,138) for COR Social

Note: The number of children reported below for change scores represents only those who had complete fall and spring measures from the same classroom/teacher; thus there were far more pupils who actually attended RECAP-affiliated programs.

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

Table 8 2004-2005 Time 1 COR and COR Changes*								
	Time 1				Change Score			
Skill Area	N	Mean	Std. Dev.	Std. Error of Mean	N	Mean	Std. Dev.	Std. Error of Mean
Academic	2,192	2.28	0.78	0.02	1,676	1.06	0.68	0.02
Motor	2,192	2.64	0.82	0.02	1,678	1.06	0.73	0.02
Social	2,192	2.66	0.81	0.02	1,678	1.06	0.68	0.02

Note: * This data includes children of all ages in RECAP.

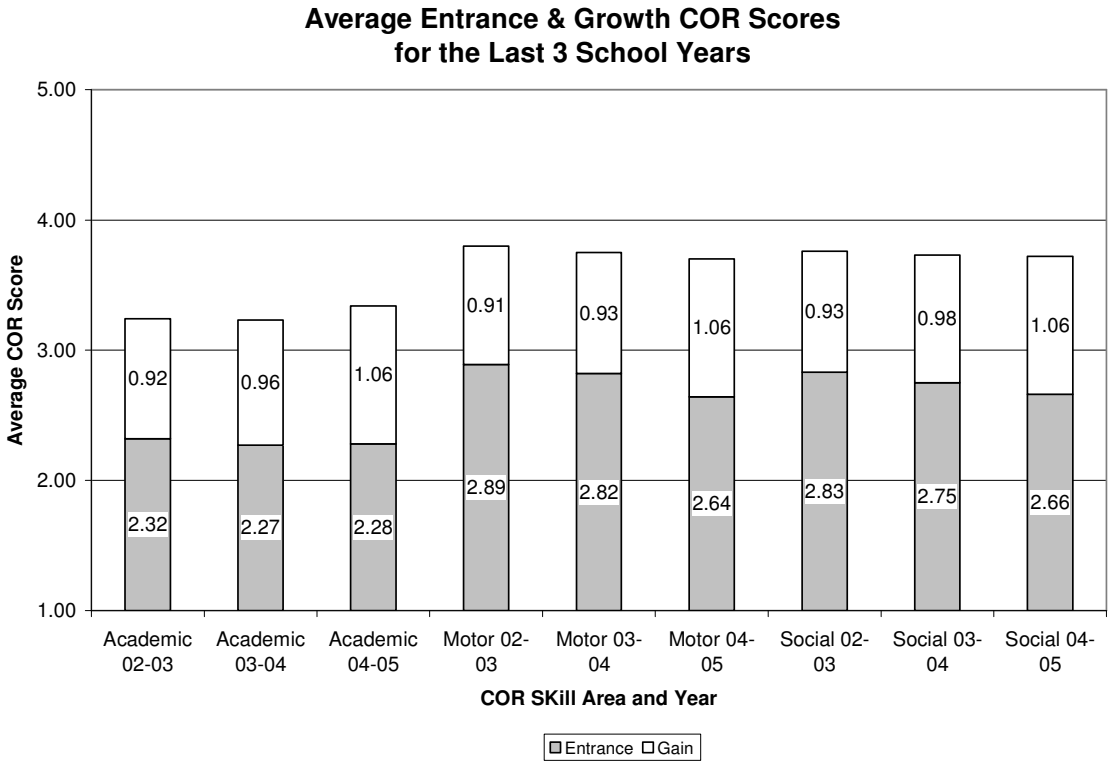


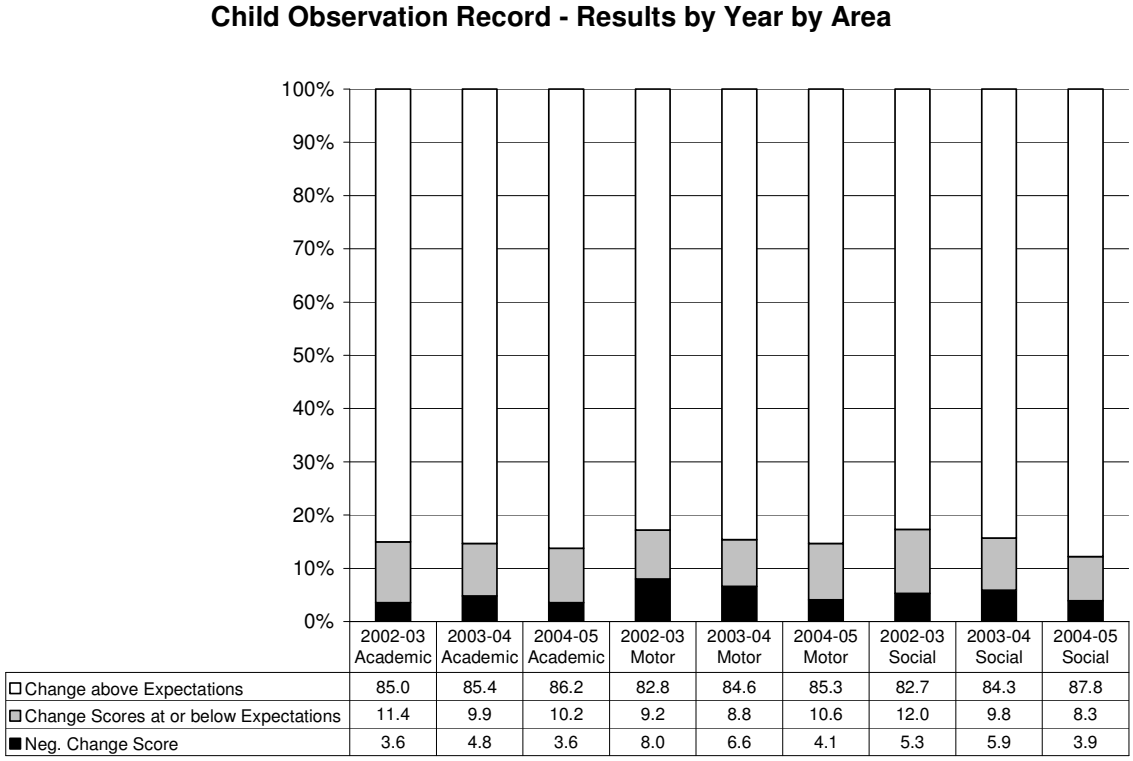
Figure 7 Average Entrance COR Scores and Average Growth Scores for the last 3 school years

At Time 1, students on average scored in the middle of the five-point scales with the majority of students scoring between a 2 and 4. Looking at Figure 7, in 2004-2005, students grew approximately 1.06 points in all three areas. This year the student entrance COR scores were slightly lower compared to the previous 2 years. However, they had higher growth rates during the year, and caught up by year end.

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 0.9-1.0 growth 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 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. Regression coefficients were 0.58, 0.53 and 0.51 for academic, motor and social subscales respectively; resulting in 7 month developmental growth estimates of 0.34, 0.31 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.



	2002-03 Academic	2003-04 Academic	2004-05 Academic	2002-03 Motor	2003-04 Motor	2004-05 Motor	2002-03 Social	2003-04 Social	2004-05 Social
Change above Expectations	85.0	85.4	86.2	82.8	84.6	85.3	82.7	84.3	87.8
Change Scores at or below Expectations	11.4	9.9	10.2	9.2	8.8	10.6	12.0	9.8	8.3
Neg. Change Score	3.6	4.8	3.6	8.0	6.6	4.1	5.3	5.9	3.9

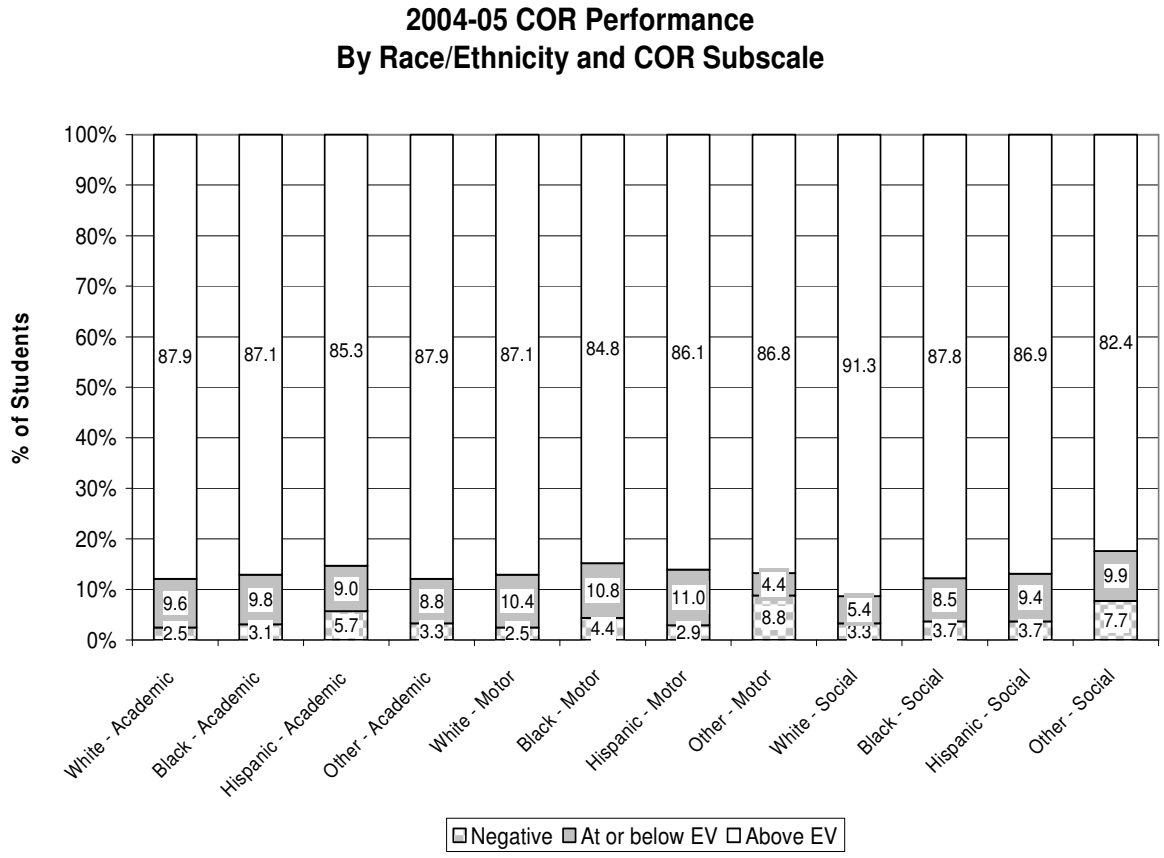
Figure 8 COR results by area and by year

Figure 8 above shows the proportion of students who had growth above the expected level and those whose growth was negative. As in previous years, well above 80% of the students had change scores above developmental expectations.

This year, the percentage of students with negative growth was considerably less than it has been for the previous 2 years, in the motor and social skills area.

Are there any differences in the outcomes by gender or race/ethnicity?

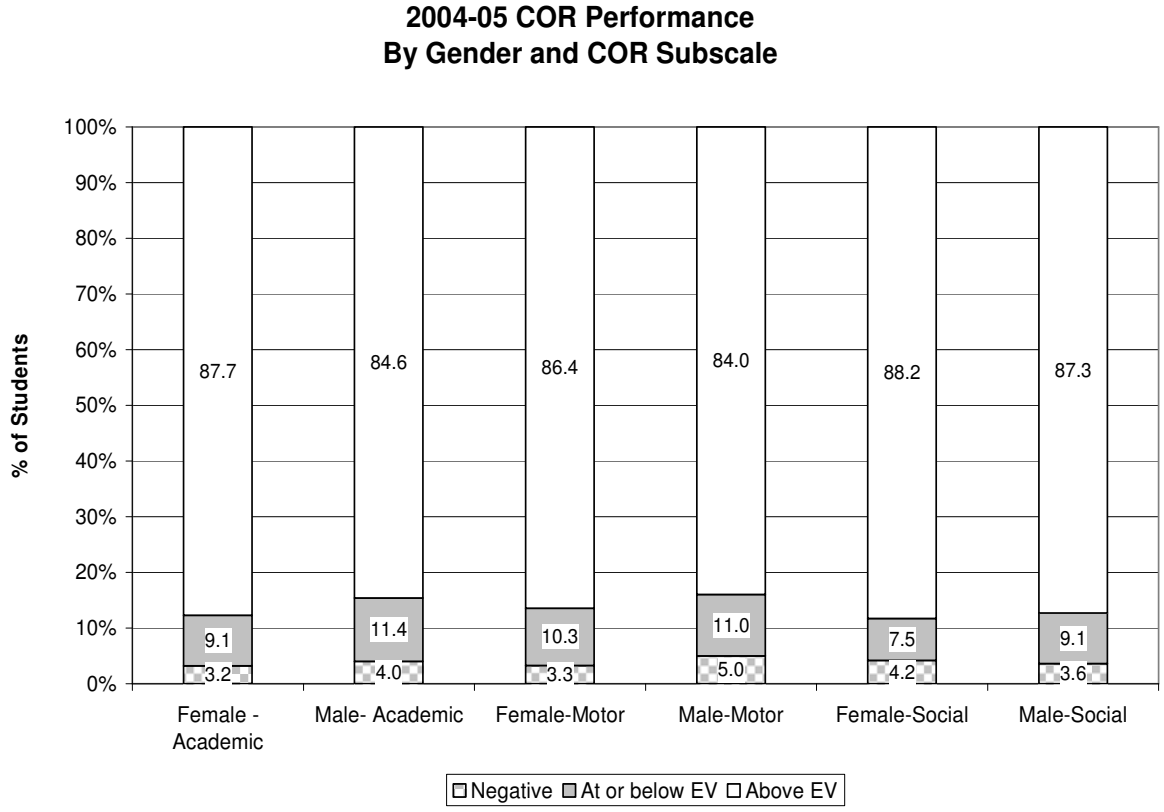
This year, just like last year, we found no detectable differences by race/ethnicity in the growth above expectations for any of the COR subscales (See Figure 9 below).



EV= Expected value, No differences by Race/Ethnicity were found to be significant at *p<.05.

Figure 9 2004-2005 COR Growth by Race/Ethnicity

This year, just like last year, we found no detectable differences by gender in the growth above expectations for any of the COR subscales (See Figure 10 below).



EV= Expected value, No differences by gender were found to be significant at *p<.05.

Figure 10 2004-2005 COR Growth by Gender

Is quality of classroom performance linked with student COR performance?

Yes, to some degree. Correlations at the aggregate classroom level were run after removing outliers in the ECERS-R total score (n=2, ECERS-R below 3.7 removed) identified using stem-and-leaf graphs.

This year, there was a small, positive correlation between the ECERS-R score and the average growth in the Overall COR scores which was significant (n=99, r=0.255, p<.05). Also, each of the COR subscales were also positively correlated with the ECERS-R score. This was true for the academic growth, (n=99, r=0.198, p<.05); for the motor growth, (n=99, r=0.317, p<.05), and for the social growth (n=99, r=0.297, p<.05).

Last year, there was also a small, positive significant correlation between the quality of the classroom environment and the average growth in the overall COR scores R (n=87, r=0.259, p<.05). However, last year, when looking at the subscales, only the social skills were significantly and positively correlated with higher scores in the ECERS-R (n=87, r=0.346, p<.05). Last year, neither motor skills growth (n=87, r=0.129, p>.05) or academic skills growth (n=87, r=0.198, p>.05) were significant. The small correlations that were found both last year and this year are quite similar; however, the slightly larger sample size this year is producing slightly stronger significance levels.

As a further note of caution regarding these correlations, even with the strongest correlation found this year, quality of the classroom explains around 10% or less of the variation in the COR, leaving 90% or more explained by other factors.

Is there a relationship between high and very high quality environments and improvement of students' COR scores?

As in past years, we also investigated this question by classifying the classrooms into two groups: high quality and very high quality groups based on the median ECERS-R score. A one-way multivariate analysis of covariance (MANCOVA) was conducted to determine the effect of high and very high quality on COR growth variables while controlling for the gender and race/ethnicity of the students in each class.

This year there were no significant differences found in the outcomes by quality group (Wilks' Lambda = 0.955, F(3,91)=1.446, p>.05).

Last year there were also no significant differences in the outcomes by quality group (Wilks' Lambda = 0.923, F(3,78)=2.144, p>.05).

What do these results mean?

This year, just like last year, we detected a small, positive, significant correlation with overall COR growth, but it is not detectable by our MANCOVA. These replicated results suggest that there is a small, but detectable, link between ECERS-R scores and the growth in overall COR scores.

Consequently, replicated results also suggest no measurable link between ECERS-R scores and change in the COR scores for "high" compared with "very high" quality classrooms. These results may be due partly to the difficulty of differentiating between ECERS-R classrooms when so many of the RECAP classrooms have very high ECERS-R scores.

COR Scores by Student Age Group

The purpose of the following analysis is to see what impact student age had on total COR scores.

Table 9a below displays the pre and post period total COR scores by age group and by year. As might be expected, the four-year-olds started off with a higher fall COR score by 0.51 in 2004-2005; and by 0.61 in 2003-2004.

Table 9a

COR Scores by Age Group for All Programs Inclusive

	2003-04				2004-05			
	Pre		Post		Pre		Post	
Score Range	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	77	51	2	0	113	104	13	3
1.5 - 2.4	241	517	70	61	257	683	118	82
2.5 - 3.4	126	865	187	416	94	664	219	434
3.5 - 4.4	8	205	94	855	24	198	87	652
4.5 - 5.0	1	12	3	186	0	5	10	281
Total Count	453	1650	356	1518	488	1654	447	1452
Mean Score	2.10	2.71	3.00	3.72	2.04	2.55	2.88	3.71

Table 9b shows that the mean score change was also higher for the 4-year-olds. In 2004-2005, the 3-year-olds gained 0.95 in COR total score and the 4-year-olds gained an average 1.14 in scores. The 4-year-olds gained more than the 3-year-olds in the last two years.

Table 9b

COR Growth by Age Group for All Programs Inclusive

	2003-04 Gain		2004-05 Gain	
Change Range	Number of 3-Year-Olds	Number of 4-Year-Olds	Number of 3-Year-Olds	Number of 4-Year-Olds
Less than 0	12	39	18	21
0.00 - 0.49	56	215	61	146
0.50 - 0.74	56	183	48	160
0.75 - 1.00	69	288	72	224
Greater than 1.00	97	613	159	741
Total Count	290	1338	358	1292
Mean Score Change	0.83	1.01	0.95	1.14

Table 9c 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 three COR subscales: motor, social, and academic skills. The percentage of 4-year-olds that were successful in 2004-2005 was 95%. This percentage was even higher than last year at 92%. The percentage of 3-year-olds that were successful was 92% which was close to what it was last year at 91%.

Table 9c

Children with pre-post matches, who had gains of 0.50 points or greater on one or more of the three COR subscales: motor, social, and academic skills				
	2003-04		2004-05	
	Number of 3-Year-Olds	Number of 4-Year-Olds	Number of 3-Year-Olds	Number of 4-Year-Olds
Total Count	290	1338	358	1292
Total Successful	264	1,235	329	1225
Percent	91%	92%	92%	95%

From the t-tests between group means in Table 9d, we can see that there are definitely significant differences in COR group means between three-year-olds and four-year-olds in RECAP again in 2004-2005. This finding is really no great surprise, but these tests simply verify these differences. It is interesting, however, that even the mean growth in COR scores was significantly different between the two age categories in both 2004-2005 and in 2003-2004.

Table 9d

t-Tests Comparing 2004-05 3-Year-Olds with 4-Year-olds							
	Group of Three-Year-olds			Group of Four-Year-olds			Differences in Age Groups
	n	Mean	Std Dev	n	Mean	Std Dev	Differences
COR Total Time 1	488	2.04	0.72	1654	2.55	0.74	**-0.51***
COR Total Time 2	447	2.88	0.77	1452	3.71	0.75	**-0.83***
COR Total Growth	358	0.95	0.60	1292	1.14	0.60	**-0.19***
Note: * significant at Pr (t) <=.05							

t-Tests Comparing 2003-04 3-Year-Olds with 4-Year-Olds							
	Group of Three-Year-olds			Group of Four-Year-olds			Differences in Age Groups
	n	Mean	Std Dev	n	Mean	Std Dev	Differences
COR Total Time 1	453	2.10	0.64	1650	2.71	0.68	**-0.61***
COR Total Time 2	356	3.00	0.66	1518	3.72	0.64	**-0.72***
COR Total Growth	290	0.83	0.48	1338	1.01	0.64	**-0.19***
Note: * significant at Pr (t) <=.05							

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=2,243) for Task Orientation
- 0.93 (n=2,234) for Behavior Control
- 0.94 (n=2,225) for Peer Sociability
- 0.91 (n=2,231) for Assertive Social Skills.

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

Table 10 below shows the percentage of students with socio-emotional risk factors at entrance into pre-kindergarten: 13% of students enter preschool with multiple socio-emotional risk factors, and an additional 12% enters preschool with a single socio-emotional risk factor.

Table 10 Number of Students with Socio-Emotional Risk Factors at Time 1

Table 10				
Number of Students with Socio-Emotional Risk Factors at Time 1				
	2003-2004		**2004-2005**	
	Frequency	**Percentage***	**Frequency**	**Percentage***
No Risk Factors	1725	76.1%	1695	75.0%
Behavior control Only	45	2.0	51	2.3
Assertive Social Skills Only	78	3.4	76	3.4
Peer Sociability Only	48	2.1	55	2.4
Task Orientation Only	83	3.7	80	3.5
Multiple Risk Factors	287	12.7	303	13.4
Number of valid responses	2266	78.5% (% of total students)	2260	81.0% (% of total students)
Total RECAP Students	2887	-	2790	-
Note: * Percentage of valid responses				

Demographics of students and the prevalence of risk factors

This year there were no gender or race/ethnicity differences found in the number of socio-emotional risk factors by risk factor type at entrance into prekindergarten. A cross tabulation of gender with the number of risk factors was performed to determine if there was a difference in the number of risk factors by gender. No statistically significant association was found ($\chi^2 = 9.293$, $p > .05$). Another cross tabulation of race/ethnicity with the number of risk factors was performed to determine if there was a difference in the number of risk factors by race/ethnicity. Once again, no statistically significant association was found ($\chi^2 = 15.064$, $p > .05$).

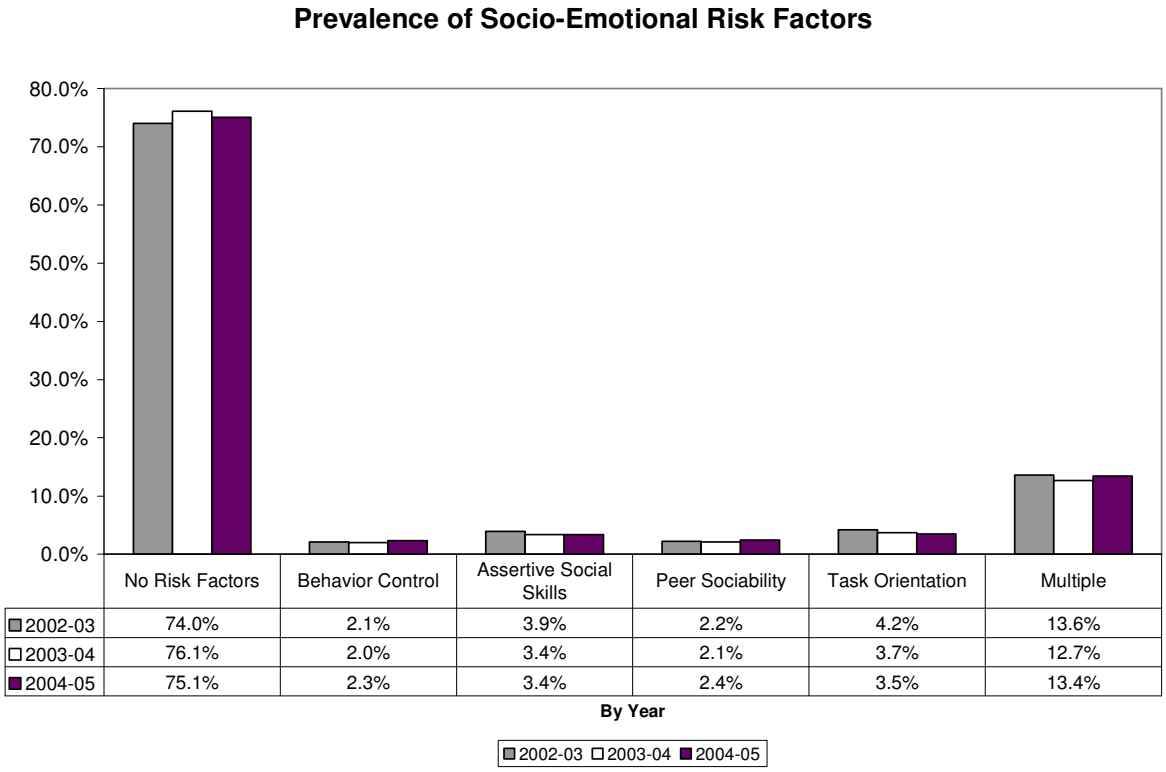


Figure 11 Prevalence of socio-emotional risk factors at entrance into prekindergarten for the last 3 years

From looking at Figure 11 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. As in last year's findings, there were significant differences in the average (mean) COR scores by Time 1 socio-emotional risk status (Wilks' Lambda = 0.847, $F(15,5356)=22.139$, $p<.01$). Figure 12a graphically displays differences in initial COR scores by initial risk status for 2004-2005. Figure 12b shows 2003-2004 results for comparison purposes. Table 11 shows the sample sizes of students by risk status in this analysis.

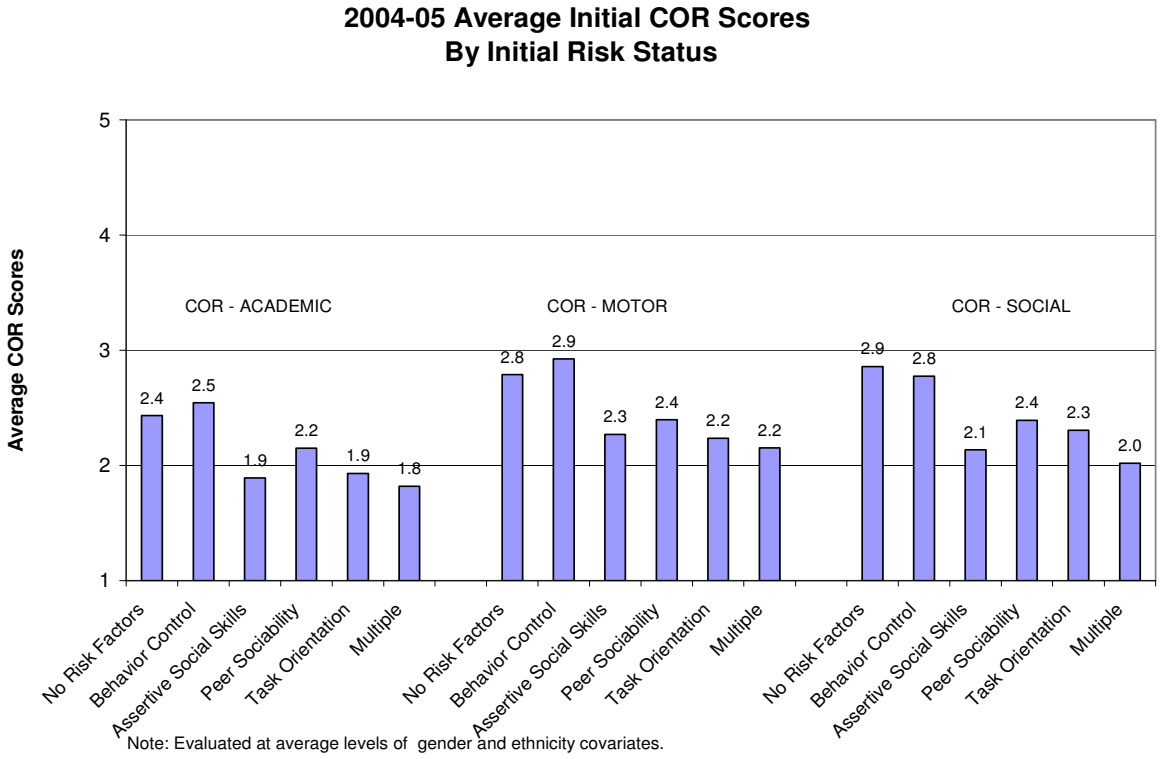


Figure 12a 2004-2005 Initial COR Scores by socio-emotional risk status

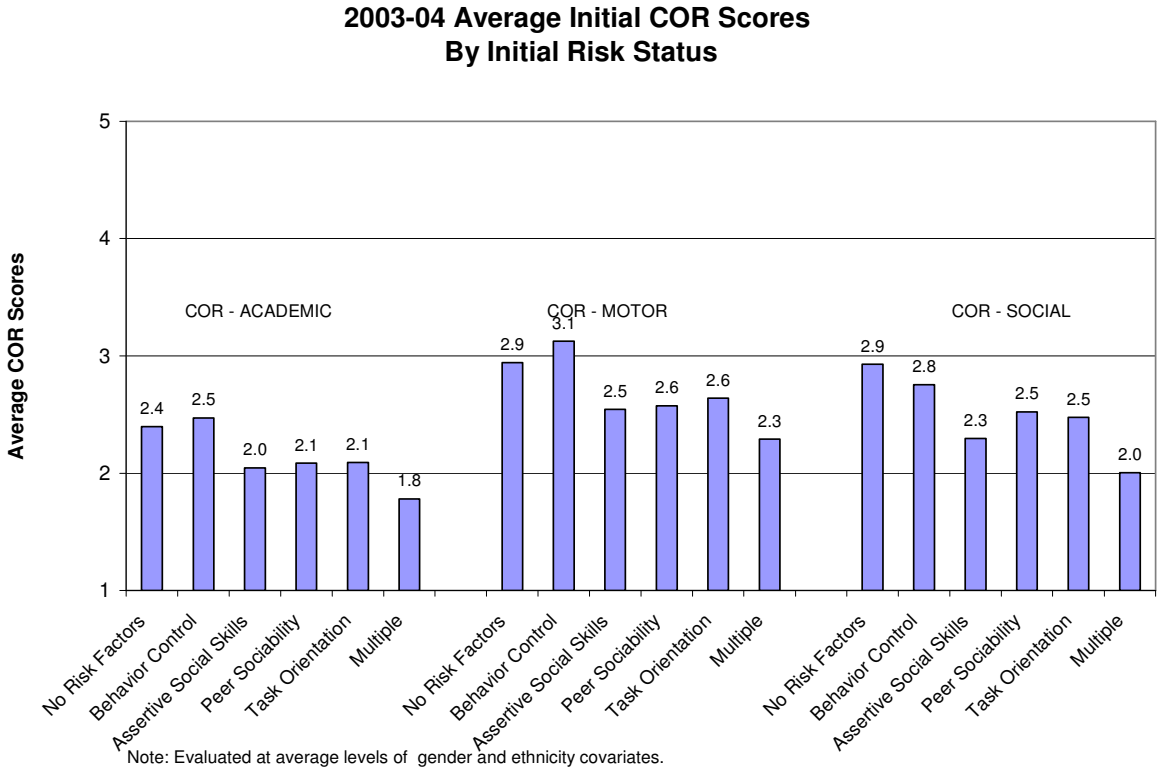


Figure 12b 2003-2004 Initial COR Scores by socio-emotional risk status

Comparing figures 12a and 12b we can see very similar results in student's socio-emotional risks in back to back years.

Table 11 Number of Students with Socio-Emotional Risk Factors and COR scores at Time 1

Table 11 Number of Students with Socio-Emotional Risk Factors and COR Scores at Time 1				
	2003-2004		2004-2005	
	Frequency	Percentage*	Frequency	Percentage*
No Risk Factors	1277	76.3%	1484	76.0%
Behavior control Only	29	1.7%	38	2.0%
Assertive Social Skills Only	56	3.3%	64	3.3%
Peer Sociability Only	38	2.3%	50	2.6%
Task Orientation Only	57	3.4%	71	3.6%
Multiple Risk Factors	218	13.0%	245	12.6%
Number of valid responses	1675	58% (% of Total RECAP Children)	1952	70% (% of Total RECAP Children)
Total RECAP Children	2887	-	2790	-

Note: * Percentage of valid responses

Again this year, Pairwise Comparisons were used to reveal some interesting patterns. For all three COR subscales, the differences between COR scores for students with the behavior control risk factor and students with no risk factors were not statistically significant. This is the second year in a row that we have seen this pattern.

Pairwise comparisons results: for cognitive, no risk factors with behavior risk mean diff =-.113, std error=.120, p>.05; for motor, no risk factors with behavior risk mean diff =-.137, std error=.128, p>.05; for social, no risk factors with behavior risk mean diff =-.084, std error=.124, p>.05.

However, in the main, we can see in Figure 12a that 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 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, Black students were found to have scored about 0.2 lower than non-Black students in the academic and social skills means. The motor skills were not different for Black students compared to non-Black. Considering that the standard deviation for COR scores is 0.8, the actual effect size for the academic skills is moderate at 0.25 (0.2 divided by 0.8).

(Wilks' lambda =0.993, $F(3,1940)=4.698$, $p<.05$; academic: $b=-0.172$,$t=-2.432$,$p<.05$; motor: $b=-0.065$, $t=-0.854$, $p>.05$; social: $b=-0.199$, $t=-2.737$,$p<.05$).

Last year, Black students were found to have scored about 0.3 lower than non-Black students in the academic and social skills means and about 0.1 lower in the motor skills means. The differences seem to be diminishing, but may be random variation.

This year, Hispanic students scored about 0.25 lower than non-Hispanic students in the academic and social skills, and about 0.2 in the motor skills. The actual effect size here is small to moderate at 0.3, 0.3, and 0.2, in units of the COR scale, for academic, motor, and social skills respectively.

Last year, Hispanic students scored about 0.4 lower than non-Hispanic students in the academic and social skills and about 0.3 lower in the motor skills. Once again, the differences seem to be diminishing.

(Wilks' lambda =0.994, $F(3,1940)=4.134$, $p<.05$; academic: $b=-0.252$,$t=-3.174$,$p<.05$; motor: $b=-0.187$, $t=-2.209$, $p<.05$; social: $b=-0.256$, $t=-3.132$,$p<.05$).

White students this year were only slightly higher than non-White students in the academic COR subscale. There were no measurable differences in the motor and social skills.

(Wilks' lambda =0.996, $F(3,1940)=2.603$, $p>.05$; academic: $b=+0.048$,$t=-0.602$,$p>.05$; motor: $b=-0.84$, $t=-0.990$, $p>.05$; social: $b=-0.109$, $t=-1.346$,$p>.05$).

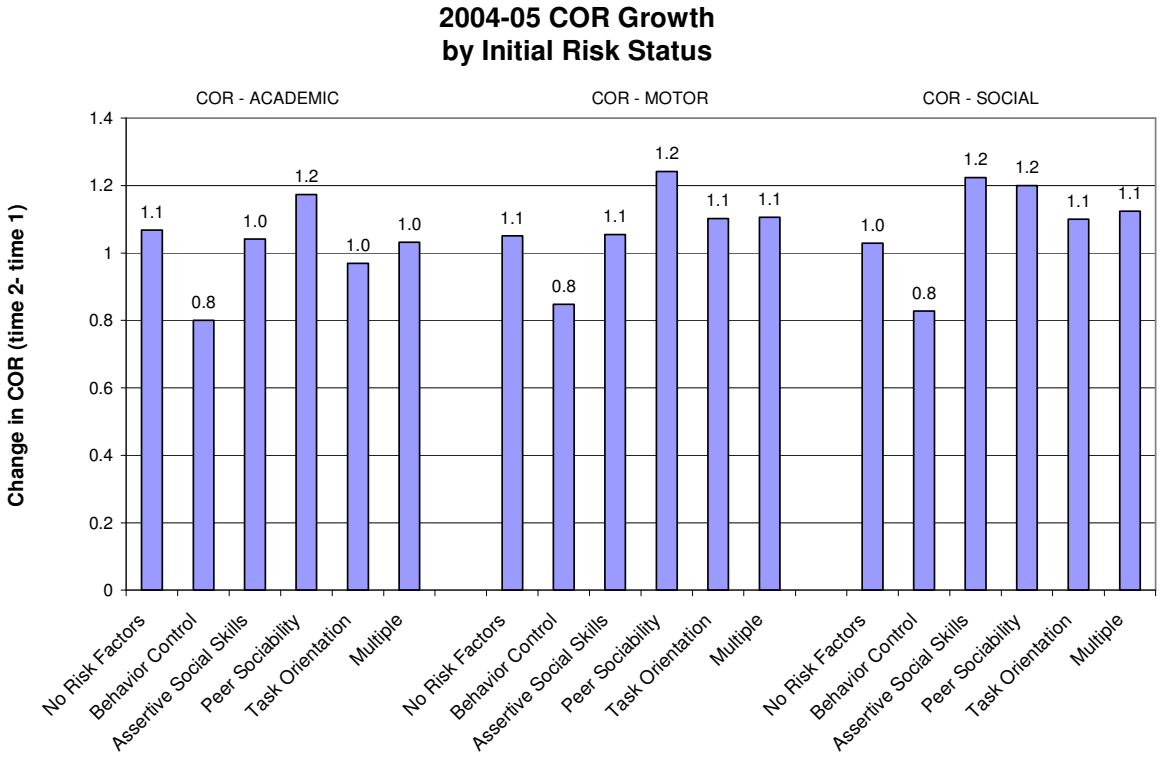
Gender differences
Gender differences were once again seen this year: male students scored lower than females with comparable risk factors in all three measures. Males were 0.107 lower in academic, 0.123 lower in motor, and 0.160 lower in social skill means. These differences were also seen last year, but the size of the differences due to gender was double last year compared to this year (for all 3 COR subscales).

(Wilks' lambda = 0.989, $F(3,1940)=7.352$, $p<.05$; academic: $b=-0.107$,$t=-3.23$,$p<.05$; motor: $b=-0.123$, $t=-3.74$, $p<.05$; social: $b=-0.160$, $t=-4.69$,$p<.05$).

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

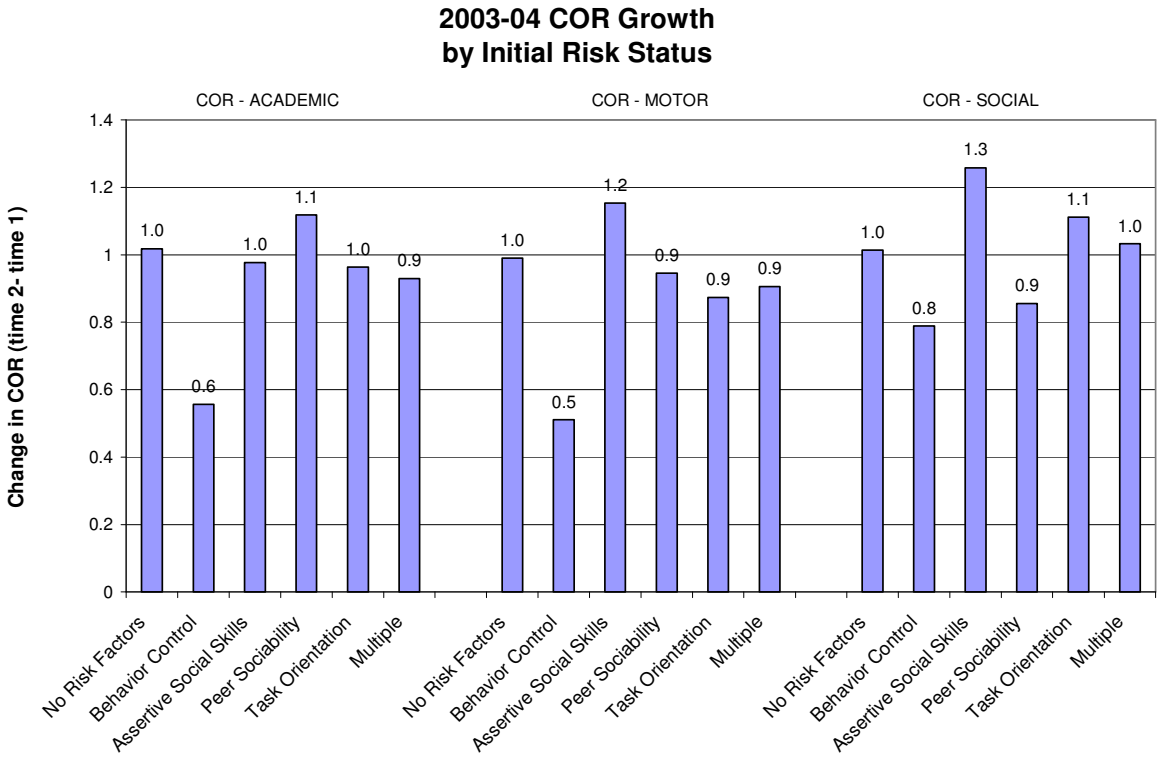
A one-way multivariate analysis of covariance (MANCOVA) was conducted to determine the association between Time 1 risk statuses and COR change scores while controlling for race/ethnicity and gender status. Just like last year, there were significant differences in the average COR growth scores by Time 1 socio-emotional risk status (Wilks' Lambda = 0.983, $F(15,4098)=1.657$, $p<.05$).

What is most noteworthy again this year is that (see Figure 13a) students with a single behavior control risk factor are clearly having lower growth in COR (0.8 growth) in all 3 COR subscales, when compared to students with other risk factors or no risk factors at all. Figure 13b shows 2003-2004 results for comparison purposes (to show year to year repeatability). This result has now been replicated 2 years in a row. Table 12 displays the sample size for students in this analysis.



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

Figure 13a 2004-2005 COR Change scores by socio-emotional risk status



Note: Marginal means evaluated at average levels of the gender and race/ethnicity covariates.
Figure 13b 2003-2004 COR Change scores by socio-emotional risk status

Table 12 Students with Socio-Emotional Risk Factors and COR scores at Time 1 and Time 2

Number of Students with T-CRS Socio-Emotional Risk Factors and COR scores at Time 1 and Time 2				
	2003-2004		**2004-2005**	
	Frequency	**Percentage***	**Frequency**	**Percentage***
No Risk Factors	1008	77.1%	1132	75.7%
Behavior control Only	18	1.4%	29	1.9%
Assertive Social Skills Only	45	3.4%	48	3.2%
Peer Sociability Only	31	2.4%	38	2.5%
Task Orientation Only	46	3.5%	52	3.5%
Multiple Risk Factors	160	12.2%	197	13.2%
Number of valid responses	1308	45% (% of all RECAP Students)	1496	54% (% of all RECAP Students)
Total RECAP Children	2887	-	2790	-

Note: * Percentage of valid responses

Just like last year, Pairwise Comparisons, based on means adjusted for race/ethnicity and gender, demonstrated that students who had initial multiple socio-emotional risks grew about the same amount during the academic year in all three areas compared to students who initially presented no socio-emotional risk factors. Also, just like last year, this year students who had a single assertive social skills risk factor acquired social skills at a faster rate than their not-at-risk peers.

Another observation from Figure 13a is that students who had a single peer sociability risk factor had greater or equal increases in COR growth for all 3 COR subscales, when compared to students with other risk factors.

Race/Ethnicity differences:
Based on the 2004-2005 results from this one-way MANCOVA, Black and Hispanic students who had socio-emotional risks were not found to have a significantly different COR growth patterns when compared to non-Blacks and non-Hispanics, respectively.

For Black students: Wilks' lambda =0.997, $F(3,1484)=1.656$, $p>.05$
For Hispanic students: Wilks' lambda =0.996, $F(3,1432)=1.369$, $p>.05$

This year, White students did show a very small positive difference compared to non-White students in this particular analysis, but only for the COR social subscale:

(Wilks' lambda = 0.992, $F(3,1484)=3.738$, $p<.05$; academic: $b=+0.089$, $t=+1.054$, $p>.05$; motor: $b=+.057$, $t=+0.610$, $p>.05$; social: $b=+0.249$, $t=+2.942$, $p<.05$).

Gender differences:
This year, the gender of the students who had socio-emotional risks was not found to have a significant association with COR growth (Wilks' lambda =0.997, $F(3,1484)=1.369$, $p>.05$). This result was also true in last year's MANCOVA results: (Wilks' lambda=0.999, $F(3,1432)=0.502$, $p>.05$).

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

A most noteworthy result this year was that students who initially had behavior control difficulties and no other risk factors acquired academic skills at a much slower pace than their peers. This result has now been observed 2 years in a row.

With the exception of the behavior control risk factor, the initial socio-emotional risk status of students does not impair the acquisition of skills in academic, social and motor areas as measured by the COR. Indeed, students with initial multiple risk factors in the socio-emotional domain acquired skills at the same rate as students who presented no risk initially.

Again, with the exception of the single behavior control risk factor, this result corroborates the last two years' results. 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, but were still behind overall.

Race/Ethnicity and gender differences in the rate of growth were either very small or non-existent this year for this particular analysis.

How stable are these risk factors over the prekindergarten year?

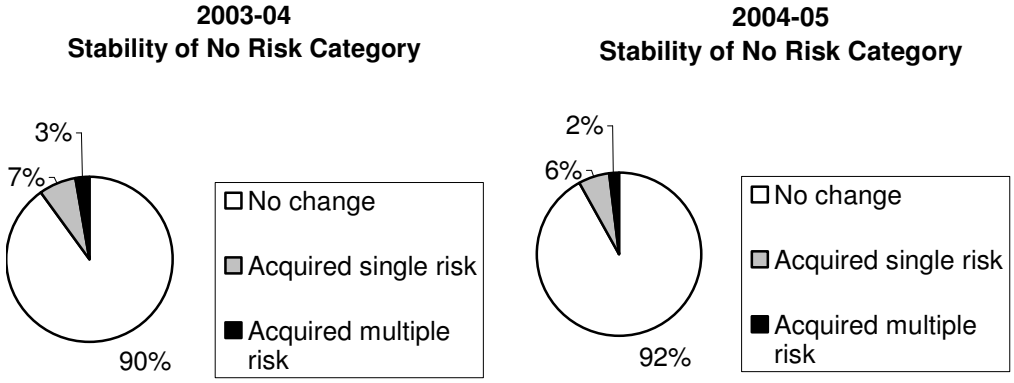


Figure 14 Pie charts for the last 2 years, stability of socio-emotional risk factors: Not at Risk at Time 1

During 2004-2005, 92% of students who were not initially at risk remained so at Time 2, while 6% acquired one risk and 2% acquired multiple risks. There is very little change from last year for this risk group.

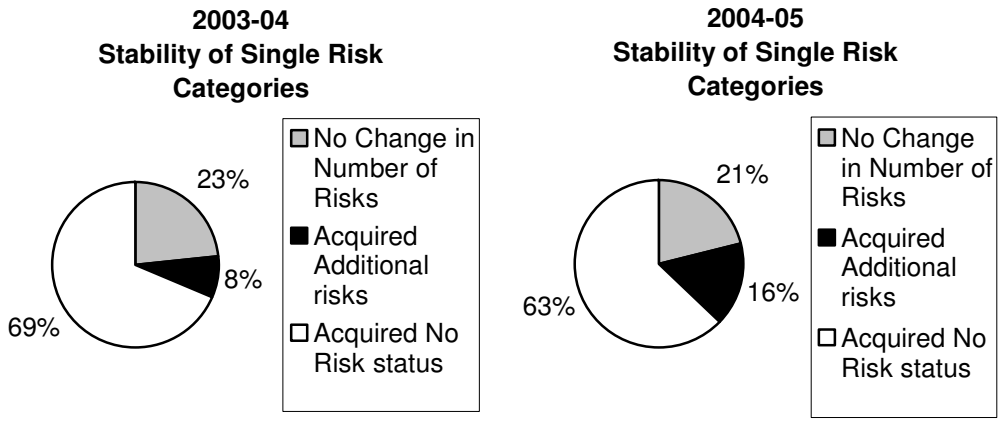


Figure 15 Pie charts for the last 2 years - Stability of socio-emotional risk factors: Single Risk Time 1 Risk

During 2004-2005, of the students who had a single socio-emotional risk status at Time 1, 63% acquired no risk status by Time 2, 21% had no change on the number of risks and 16% acquired additional risk factors. The percentage of students with a single risk who acquired multiple risks doubled this year, compared to 2003-2004**. In 2004-2005 there were 30 students in this particular category out of 1,739 RECAP students with both fall and spring T-CRS scores.**

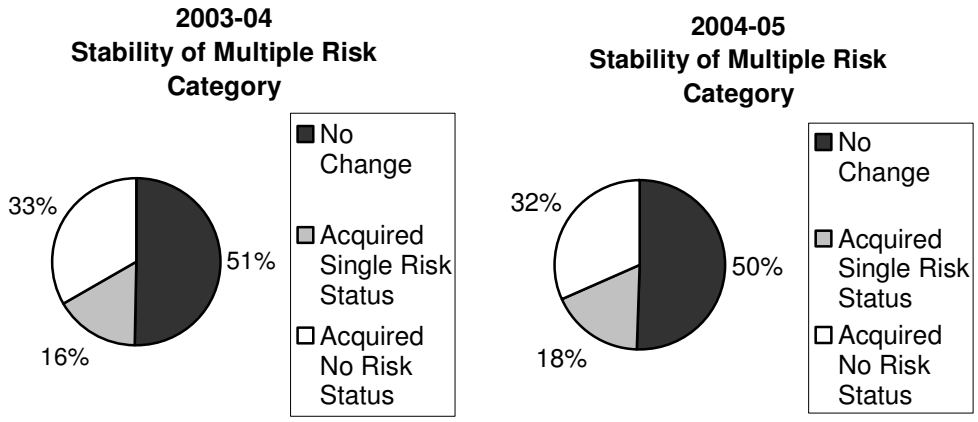


Figure 16 Pie charts for the last 2 years - Stability of socio-emotional risk factors: Multiple risks at Time 1

Of the students that presented multiple socio-emotional risks at Time 1, 50% still had multiple risks at Time 2, 18% reduced the number of risks to a single one, and 32% acquired no risk status by Time 2. These results were similar to last year.

Is quality of classroom performance linked with the improvement of students who are at risk socio-emotionally?

No. Correlations at the aggregate classroom level were run after removing outliers (n=2) identified using stem-and-leaf graphs. This year, the correlation between the ECERS-R score and the percentage of students with socio-emotional risk factors who improved was again not significant (n=99, r=0.125, p>.05). Last year, the correlation between the ECERS-R score and the percentage of students with socio-emotional risk factors who improved was also not significant (n=86, r=0.183, p>.05).

This year, there was no significant correlation of ECERS-R score with the percentage of students who were not initially at risk and whose socio-emotional status did not change (n=99, r=-0.088, p>.05) or the percentage of students initially at risk whose socio-emotional status did not change (n=99, r=-0.047, p>.05).

Is there a relationship between high and very high quality environments and improvement of students who are at risk socio-emotionally?

To answer this question we followed two steps:

1) Aggregate the data by classroom and using the median split the classrooms into two groups: 1.) High quality and 2.) Very high quality.
2) Determine if the very high quality group had a higher percentage of students who improved or a smaller percentage of students who deteriorated than the high quality group.

Aggregating by Classroom

To determine if high quality, as measured by very high ECERS-R scores, had a measurable impact in increasing the number of positive outcomes or decreasing the number of no change or negative outcomes, we aggregated the data set by classroom and selected those classrooms that had 10 or more students with complete data.

After aggregation, data were first inspected to identify outliers. Classrooms with ECERS-R scores below 3.7 were identified as outliers using stem and leaf plots and removed from the analyses (n=2). The median ECERS-R score of the remaining classrooms was 5.9, indicating the very high quality of classrooms environments that characterizes the provision of early childhood services in the City of Rochester.

Results

A one-way multivariate analysis of covariance (MANCOVA) was conducted to determine the effect of high quality versus very high quality on the socio-emotional change variable while controlling for the proportion of different ethnicities and male students in each class. There were no significant differences in the outcomes by quality group (Wilks' Lambda = 0.961, $F(3,91)=1.236$, $p>.05$). Last year there was also no significant differences in the outcomes by quality group (Wilks' Lambda = 0.964, $F(3,77)=0.969$, $p>.05$).

What do these results mean?

This year, just like last year, we did not detect any significant correlation between ECERS-R scores and the improvement of students who are at risk socio-emotionally.

Also, based on MANCOVA analysis, the data showed that there was no significant association between ECERS-R quality and the reduction of socio-emotional risk factors corroborating the last four year's results from this analysis.

Analysis Combining COR Scores, T-CRS Risks, and Student Demographics

An additional 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 the number 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 race/ethnicity, Black race/ethnicity, 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 2004-2005 RECAP children who had Pre COR total scores and who fit into one of three race/ethnicity groups. This year's results* from the regression analysis are displayed in graphical form in Figures 17a and 18a. Figures 17b and 18b display the results from 2003-2004. The following summarizes some of the findings from this analysis:

- Differences are influenced by gender. From the results of this analysis as displayed in Figure 17a, it can be seen that many differences are due to gender. We found that the best performing group was the White female group. Female subgroups were actually higher in performance than the males, with the exception of the White males. The White male subgroup performed similarly to the Black females and Hispanic females subgroups. The largest difference in COR performance was between the White females and the Hispanic males. This difference was 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 TCRS risks goes up, the COR cognitive scores go down. The COR cognitive scores generally decreases in relation to the number of TCRS risks for race/ethnicity and gender combinations.

- Figure 17a also shows that in 2004-2005 females generally performed much higher than males in terms of pre COR scores. Figure 17b displays 2003-2004 for comparison purposes.

- Figure 18a shows similar results as Figure 17a, but for COR scores in the post period. Again, Figure 18b displays 2003-2004 for comparison purposes.

*Note: The data points shown in the Figures 17a, 17b, 18a, and 18b are not actual data, but rather, estimated values based on linear regression lines which were computed from the actual data. Although the lines are "smoothed," the results represent real phenomena.

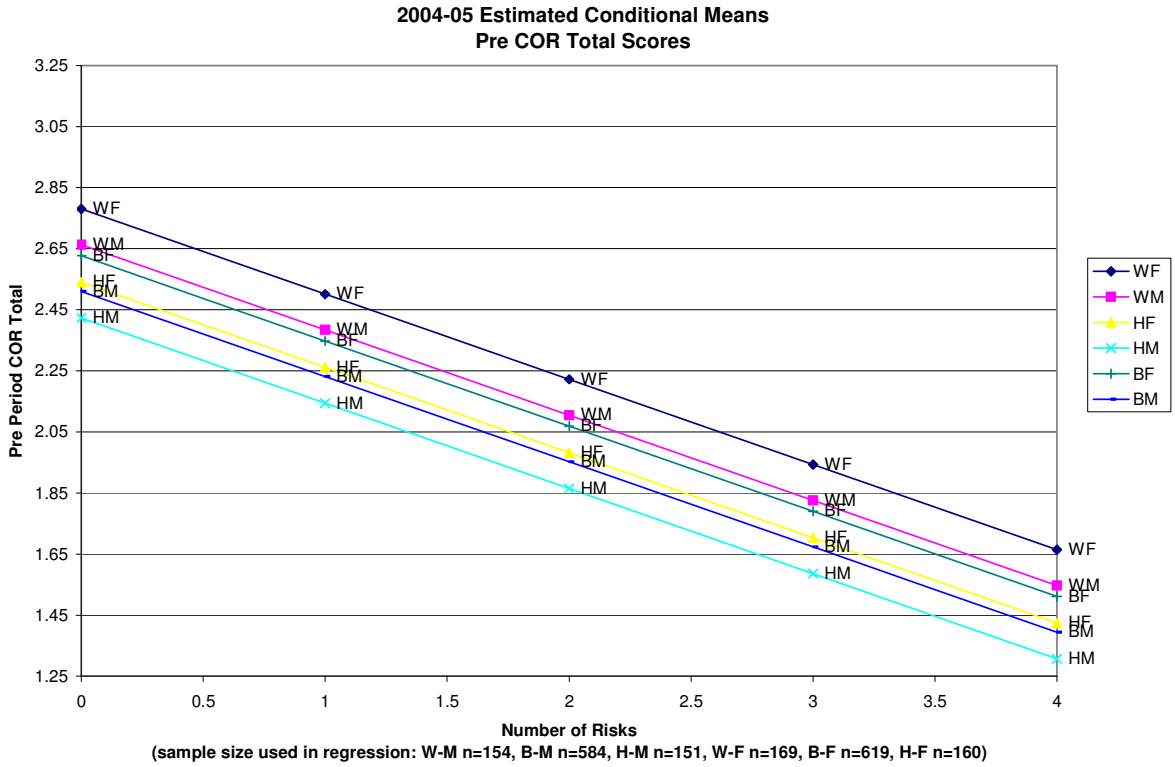


Figure 17a 2004-2005 Estimated Conditional Means Pre Period COR Scores

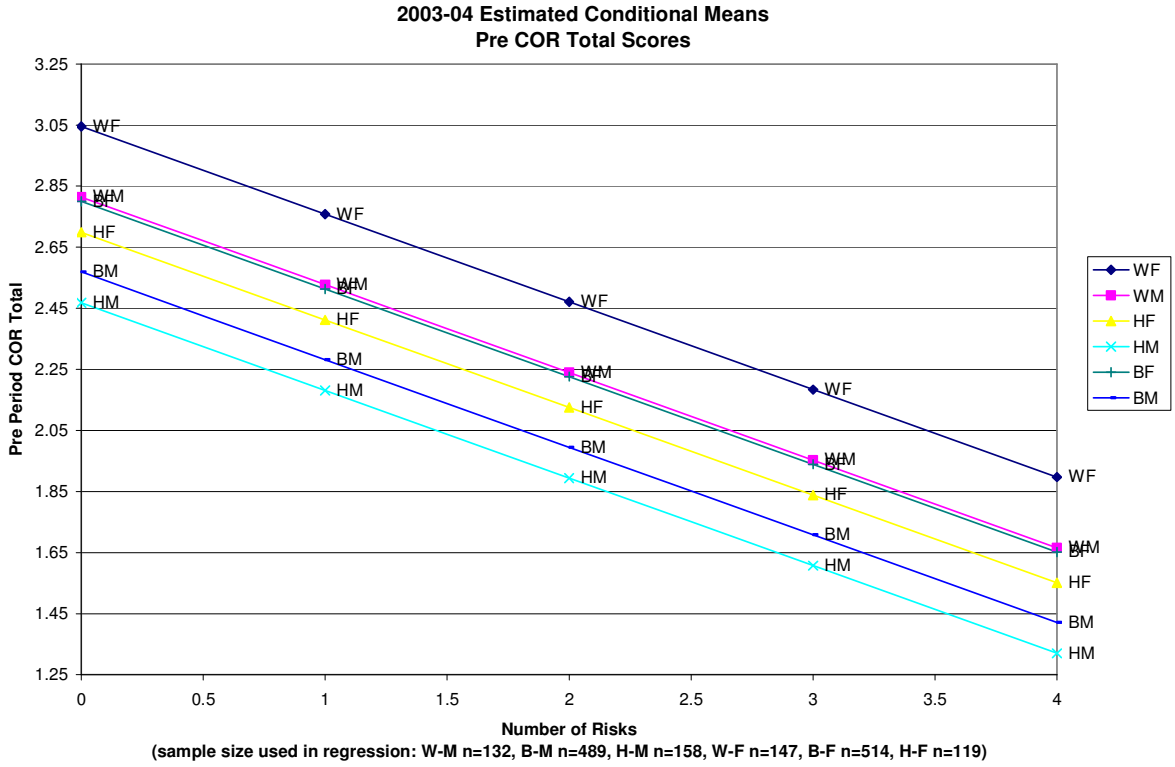


Figure 17b 2003-2004 Estimated Conditional Means Pre Period COR Scores

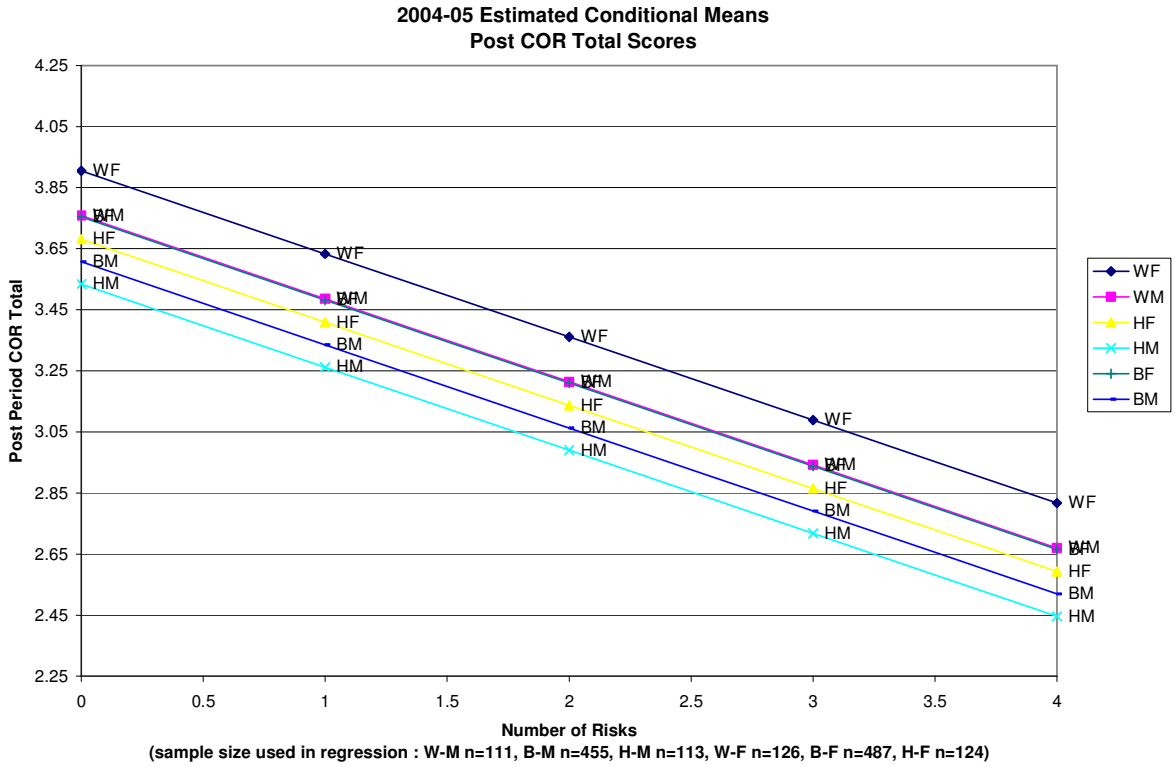


Figure 18a 2004-2005 Estimated Conditional Means Post COR Scores

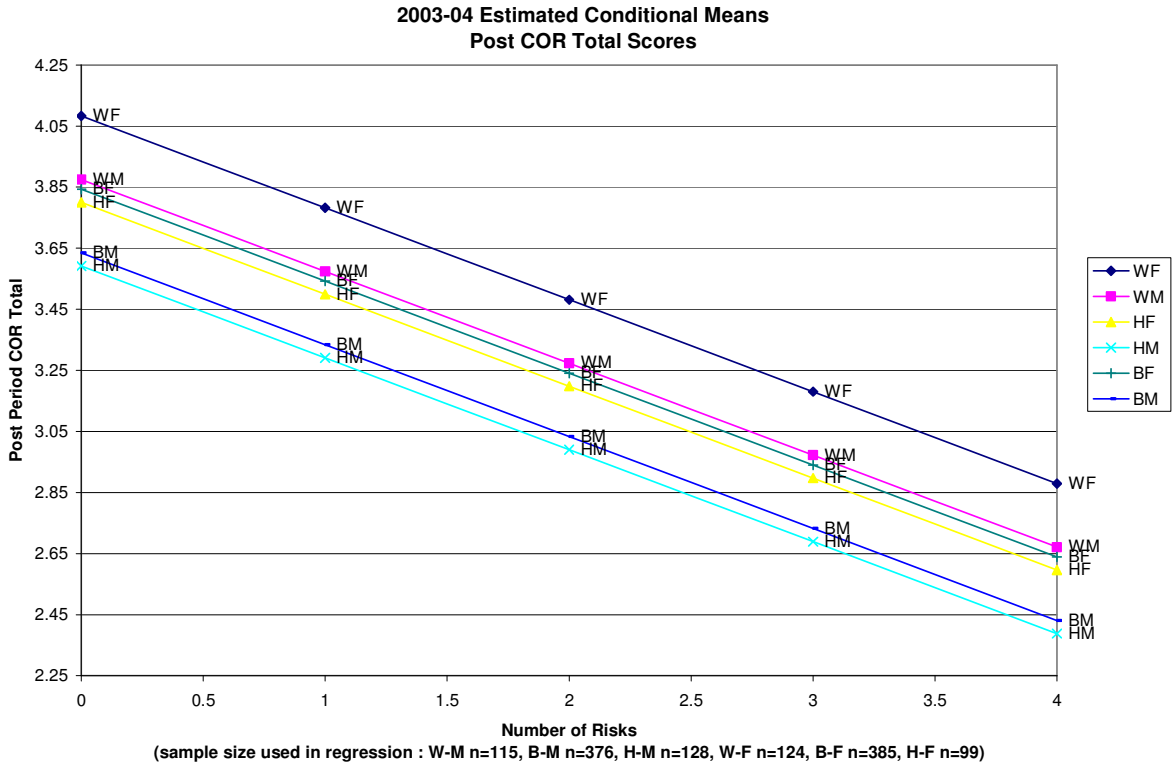


Figure 18b 2003-2004 Estimated Conditional Means Post COR Scores

Abbreviations used in Figures 17a, 17b, 18a, and 18b:

WF = White-female	WM = White-male
BF = Black-female	BM = Black-male
HF = Hispanic-female	HM = Hispanic-male

What do these results mean?

Students who arrive in the fall with multiple socio-emotional risk factors are likely to also arrive with lower levels of social, academic and motor skills. Students with a single risk factor 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 rated similarly to students with no risk factors in the academic, motor, and social areas. These analyses are based on correlation, so causation cannot be established.

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

Parent Perspectives

Early Childhood Parent Survey (ECPS) – Parental Satisfaction

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

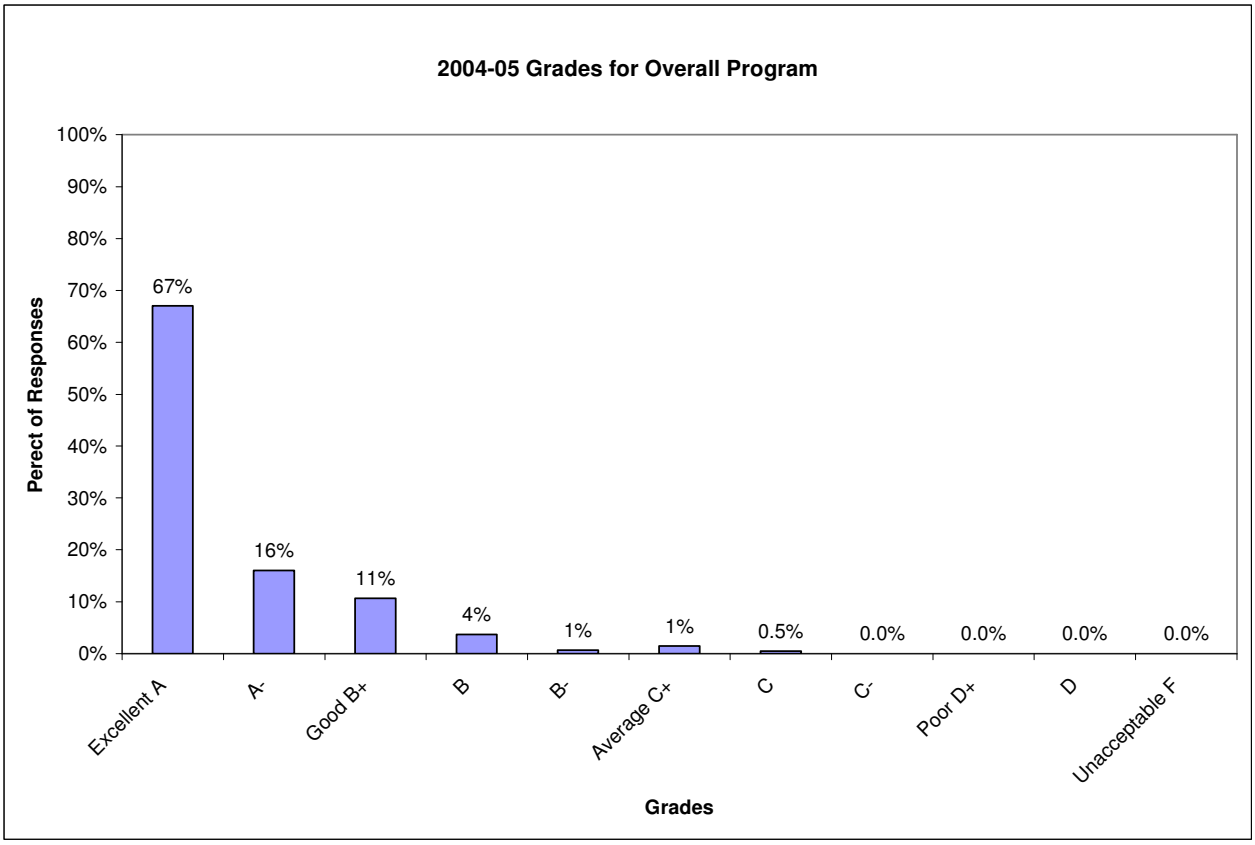
- Parent needs, communication, and involvement
- Students needs and involvement
- Learning environment
- Teachers
- Administration
- Building, room, and equipment

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 19 shows the grades for all programs combined.

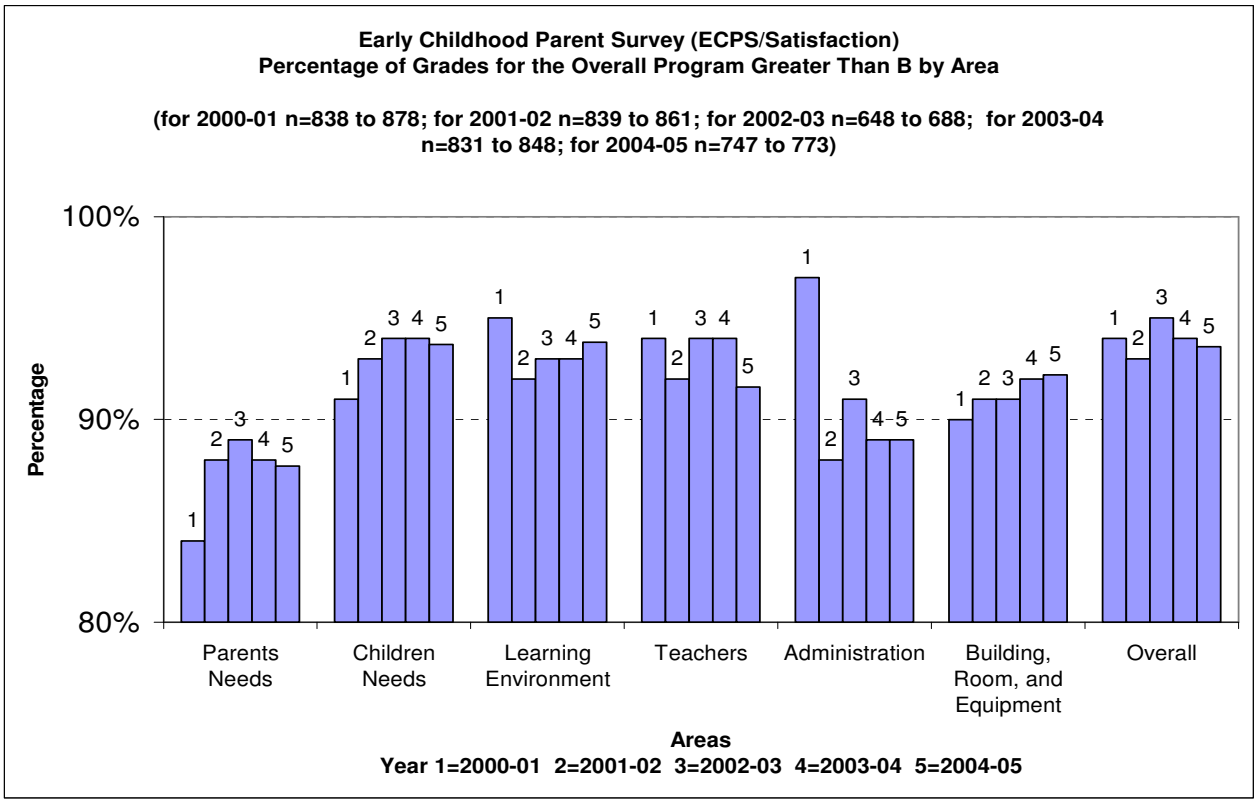


	Grades for Overall Program Last 5 Years										
	Excellent A	**A-**	**Good B+**	**B**	**B-**	**Average C+**	**C**	**C-**	**Poor D+**	**D**	**Unacceptable F**
2000-01	60%	19%	14%	4%	1%	1%	0.6%	0.2%	0.0%	0.0%	0.1%
2001-02	59%	20%	14%	4%	1%	1%	0.8%	0.2%	0.1%	0.0%	0.1%
2002-03	61%	19%	15%	3%	1%	1%	0.3%	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%

Figure 19 Parental Satisfaction for All Programs Combined

Compared with last year, is parental satisfaction with the program improving?

The satisfaction results for this year closely parallel those of previous years.

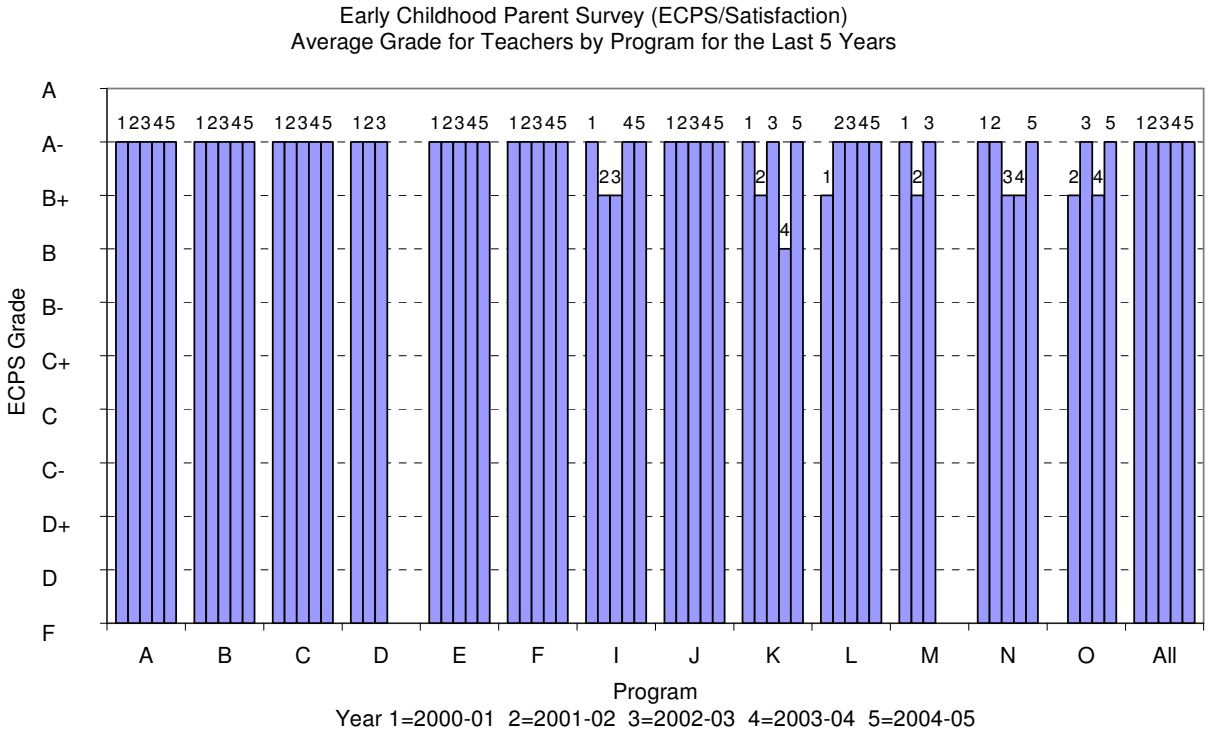


Early Childhood Parent Survey (ECPS/Satisfaction)								
		Percentage of Grades for the Overall Program Greater Than B by Area						
School Year	Year	Parents Needs	Children Needs	Learning Environment	Teachers	Administration	Building, Room, and Equipment	Overall
2000-01	1	84%	91%	95%	94%	97%	90%	94%
2001-02	2	88%	93%	92%	92%	88%	91%	93%
2002-03	3	89%	94%	93%	94%	91%	91%	95%
2003-04	4	88%	94%	93%	94%	89%	92%	94%
2004-05	5	88%	94%	94%	92%	89%	92%	94%

Figure 20 Parental Satisfaction by area

Was there variation in parent satisfaction by program?

Yes. There is some variation across programs; yet as can be seen in Figure 17 below, all programs scored a B or above, for each of the last five years.



Average Grade for Teachers by Program for the Last 5 Years															
		Program													
School Year	Year	A	B	C	D	E	F	I	J	K	L	M	N	O	All
2000-01	1	A-	A-	A-	A-	A-	A-	A-	A-	A-	B+	A-	A-	.	A-
2001-02	2	A-	A-	A-	A-	A-	A-	B+	A-	B+	A-	B+	A-	B+	A-
2002-03	3	A-	A-	A-	A-	A-	A-	B+	A-	A-	A-	A-	B+	A-	A-
2003-04	4	A-	A-	A-	.	A-	A-	A-	A-	B	A-	.	B+	B+	A-
2004-05	5	A-	A-	A-		A-	A-	A-	A-	A-	A-		A-	A-	A-

Figure 17 Parental Satisfaction Levels by Program for Last 5 years

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

For a more complete examination of the satisfaction data please consult Appendix B and D in the RECAP Statistical Supplement.

Parent Questionnaire – Pre and Post Results (New Analysis)

The Parent Questionnaire is a survey that RECAP distributes to parents every year. It asks questions that fall into 3 major areas. These 3 areas are: **Child learning topics** (questions 1 through 14 about how the child learns); **Parent learning style topics** (questions 15 through 29 about how the parent learns); and **Parent needs topics** (questions 30 through 55 about the parent's needs and areas of interest).

Figures 1 through 3 contain both the fall and spring results of this year's parent questionnaire organized into **Child learning topics, Parent learning style**, and **Parent needs topics**, the 3 major survey areas. Figures 1 through 3 are sorted by the fall "Yes" response percentage, so that the most frequent concerns of the parents are at the top of the chart. Figure 4 displays the 10 questions with the largest changes in the parents' responses from fall to spring.

All results shown in Figures 1 through 4 are based on responses that are from parents who returned both fall and spring forms (n=606). All 4 figures show the responses as a percentage of the "Yes" answers. "No" and "Maybe/Sometimes" were grouped together as a "non-Yes" for this particular report.

The results:

Child learning topics

From Figure 1 below we can see that the most important issues for parents regarding their child's learning were:

1) A8 For the child to learn to be successful in school
2) A5 For the child to learn to get along with other children
3) A3 For the child to learn to work with a teacher
4) A2 For the child to learn to share and take turns
5) A9 For the child to think for himself/herself

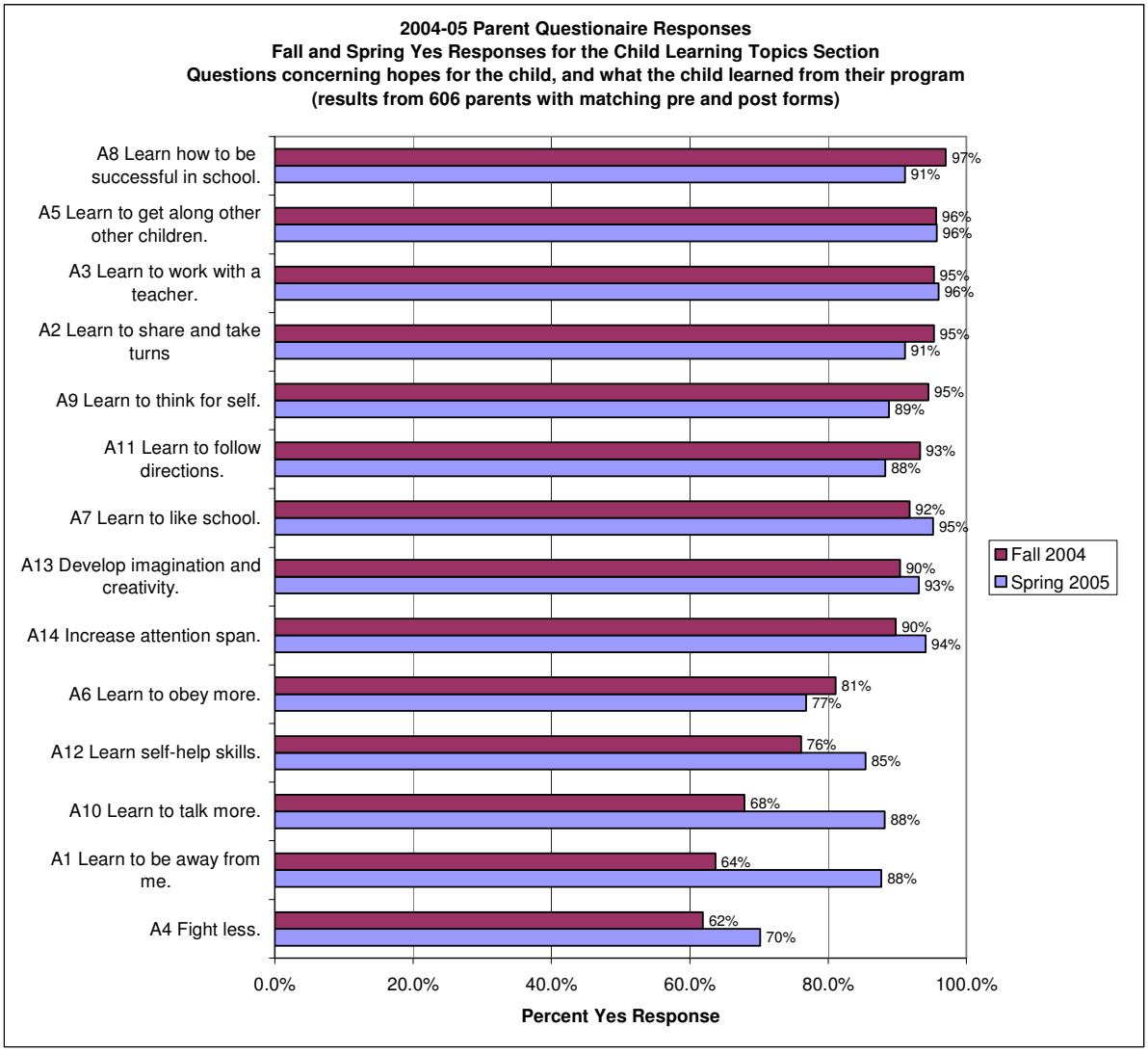


Figure 1 Child learning topics: fall and spring results

Parent learning style topics

From Figure 2 below we can see that the 5 most important ways parents learn were:

1) B6 Observing my child with other children
2) B1 Talking with someone who understands
3) B3 Talking with my child's teacher
4) B8 Watching how a teacher works with children
5) B9 Someone gives me new ideas or suggestions

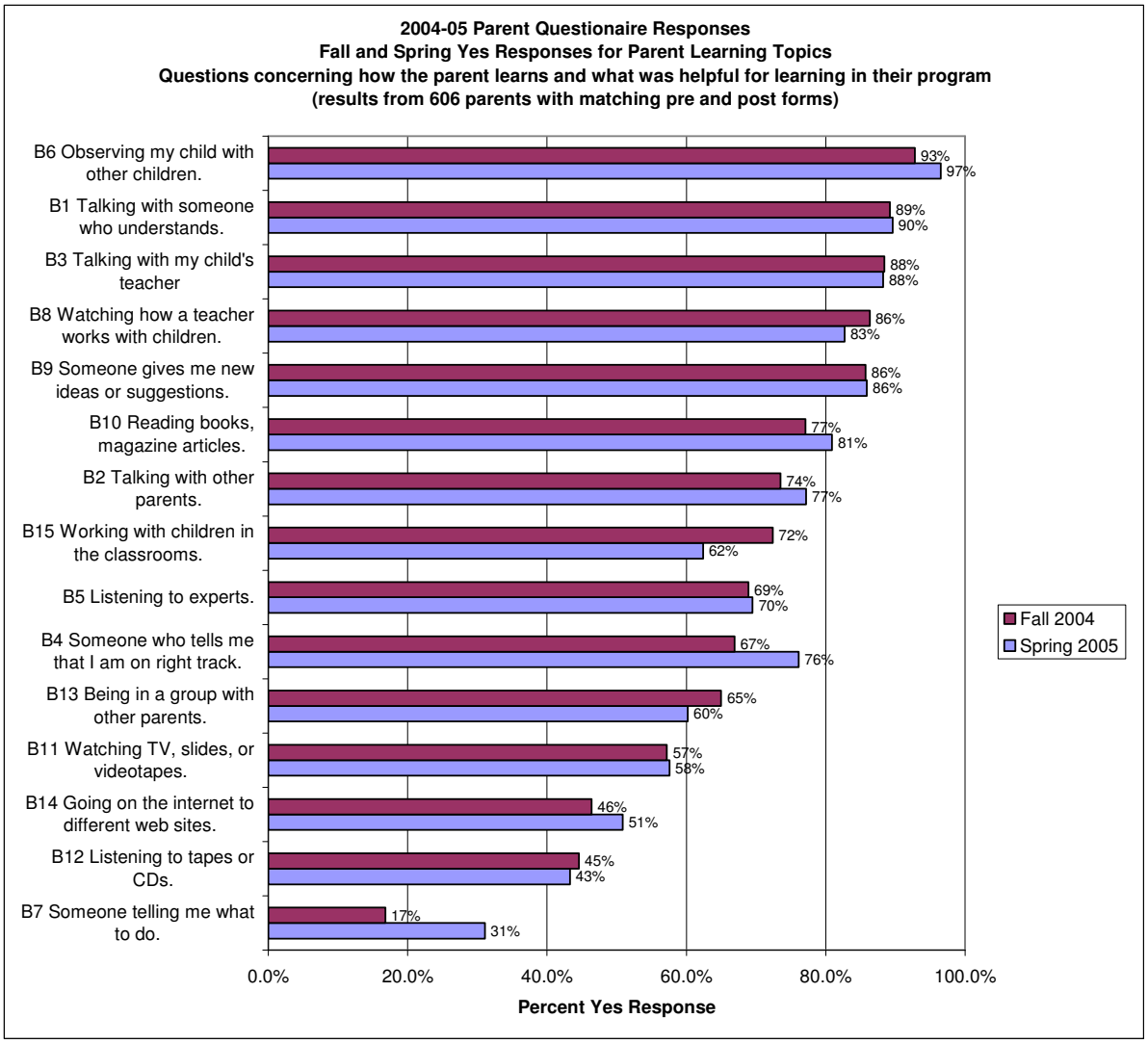


Figure 2 Parent Learning Style: fall and spring results

Parent needs topics

From Figure 3 below we can see that the 5 most important needs for parents were:

1) C2 Getting new ideas to use at home
2) C13 Learning more about schools and school programs
3) C1 Preparing children and families for kindergarten
4) C17 Making rules that work for children
5) C4 How to identify and use resources

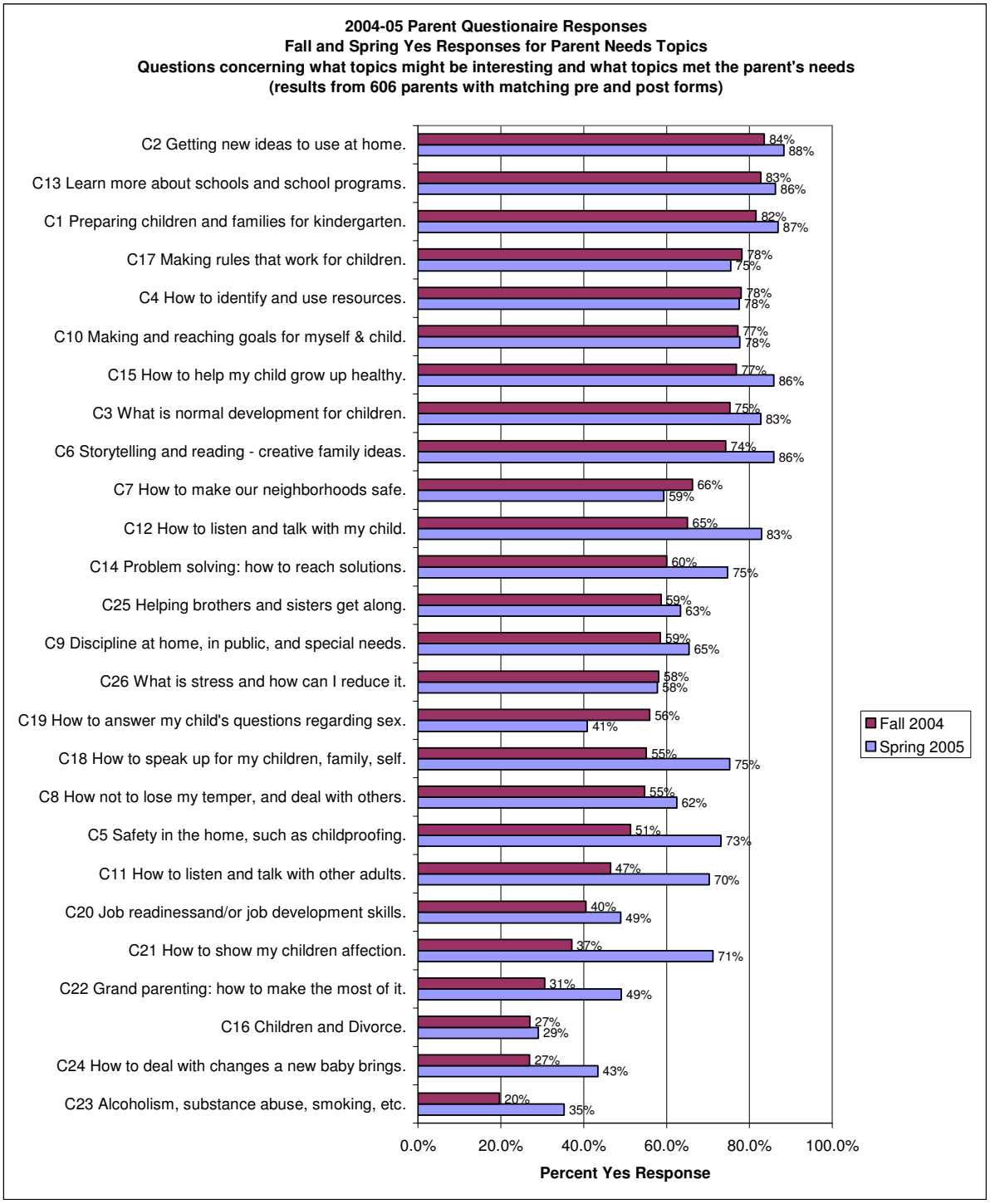


Figure 3 Parent needs topics: fall and spring results

Fall to Spring Changes in Responses

From Figure 4 below we can see that the 3 biggest changes in parent's responses from fall to spring were:

1) C21 How to show my children affection
2) A1 The child learned to be away from his/her parent
3) C11 The parent learned to listen and talk with other adults

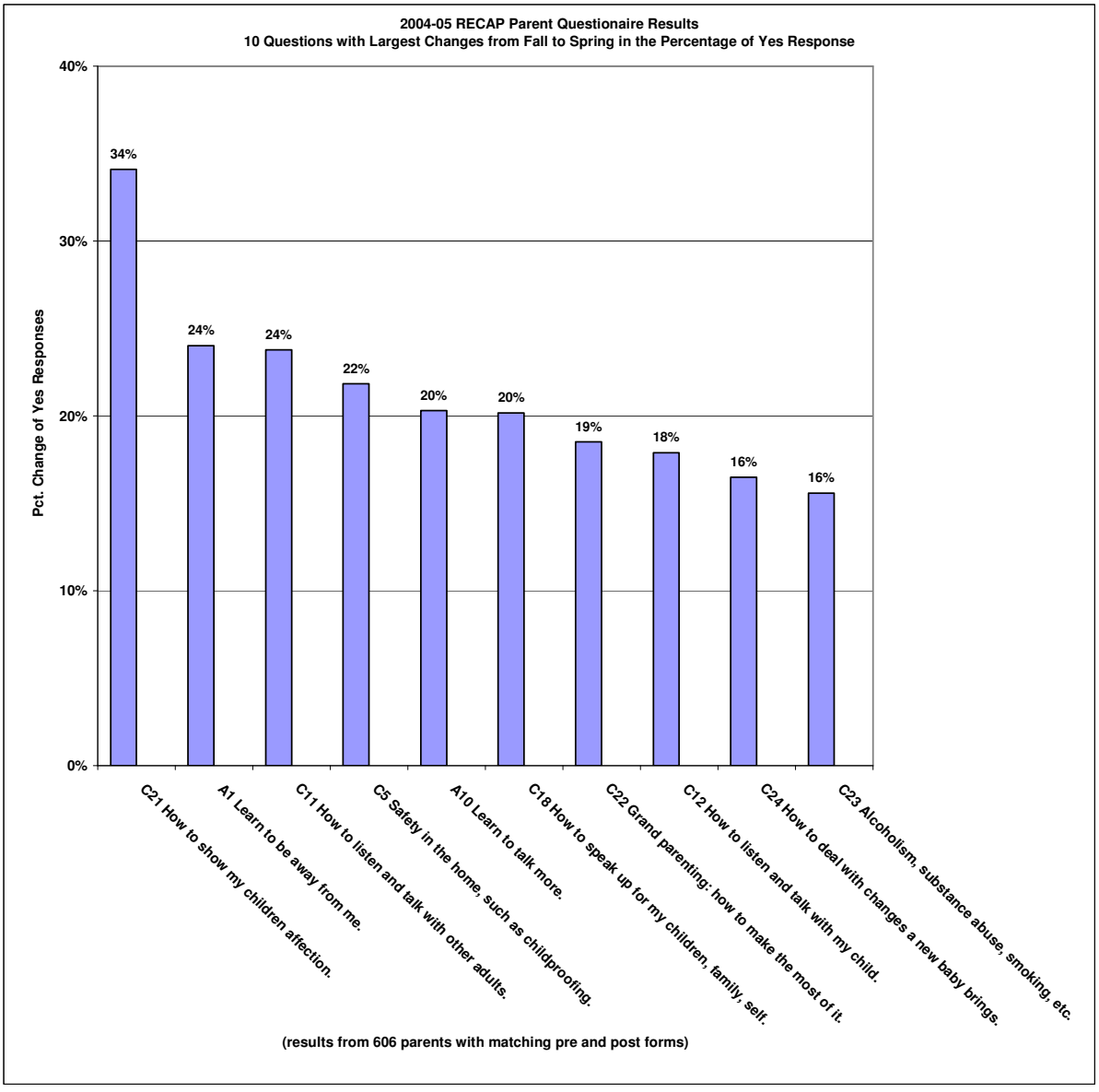


Figure 4 Ten Questions with the largest changes from fall to spring 2004-2005

Factor Analysis on the Parent Questionnaire Results

Because this is the first time we are reporting results from this questionnaire, a Principle Component factor analysis was performed on the fall 2004 responses to determine the underlying factors, if any, for each section of the parent questionnaire.

Detailed analyses and results are reported in Appendix K of the RECAP Statistical Supplement. This document is entitled: "Rochester Early Childhood Assessment Partnership 2004-2005 Eighth Annual Report, Statistical Supplement." It is further identified as T05-003 and can be downloaded from the Children's Institute web site (www.childrensinstitute.net).

Family Childcare (New Section)

We continued to move forward in our work to develop our assessment system to include family childcare providers in RECAP. In addition to the benefits it brings providers, assessment of family childcare is motivated by community investment and enthusiastic interest of our partners. Currently fifty-four family childcare providers participate in RECAP.

Collaboration with Rochester Children's Nursery Family Childcare Satellite Network (FCCSN) enables RECAP to welcome family childcare providers into our partnership in a meaningful way. We are grateful to FCCSN's uniquely qualified professionals, resources and programs that have facilitated our partnership with the first family childcare providers participating in RECAP.

The model we have developed for family childcare assessment contains two main components:

- Program assessment using the Family Day Care Rating Scale (FDCRS) (Harms & Clifford, 1989)
- Parent consent for long-term follow-up of children into the Rochester City School District (RCSD) to assess aggregate child outcomes

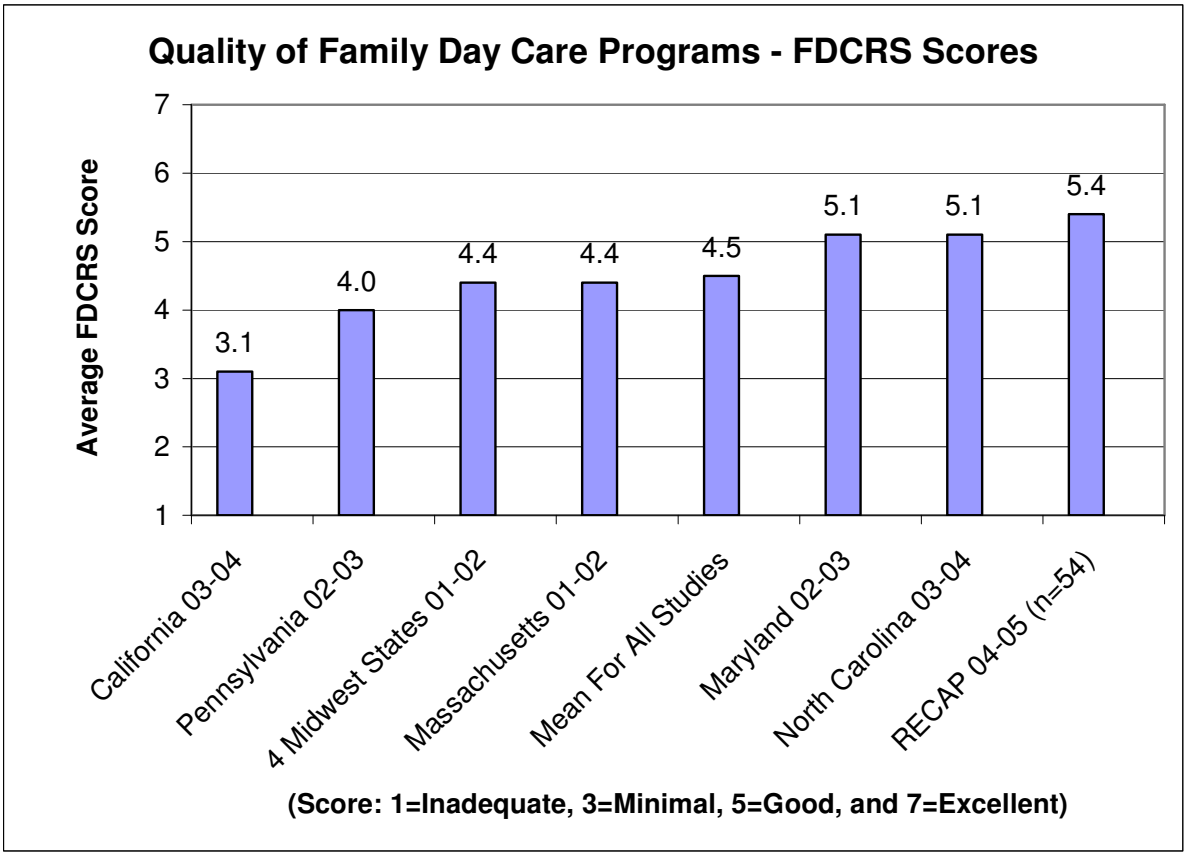
Introductory FDCRS Training is provided by Children's Institute. This year, thirty-three family childcare providers participated in Introductory FDCRS training to help them effectively use the feedback obtained from program observations.

Working together with FCCSN trainers, providers completed a self-assessment of their program and compared this to the formal assessment completed by a trained Master Observer. Using the results of the formal observation, the provider and the trainer worked together to affirm what portions of the program are working well and to assure continuance of quality practices. They also determined what areas are most in need of support and improvement. Using the observation feedback, providers identify and specifically articulate portions of the program to be improved with the purchase of equipment/materials. This financial support is facilitated by the FCCSN.

The FCCSN and Children's Institute worked with providers to obtain parent consent for long-term follow up of children into RCSD. Unfortunately, RECAP received few parent consents, despite repeated efforts through providers. The providers who responded to our inquiry about possible barriers indicated that children were not going to attend the city schools the following year, or that the parent did not choose to give consent. The assessment team will pursue parent consent again next year in hopes of obtaining useful information about short- and long-term impact of family childcare programs on kindergarten readiness.

We are pleased to include the FCCSN and its affiliated family childcare providers in RECAP. This is an exciting opportunity for the diversification of our assessment system and for Rochester's early childhood education community.

Results of FDCRS Observations



Note: The "4 Midwest States" are Iowa, Kansas, Missouri, and Nebraska

Figure 1 Quality of Family Day Care Programs

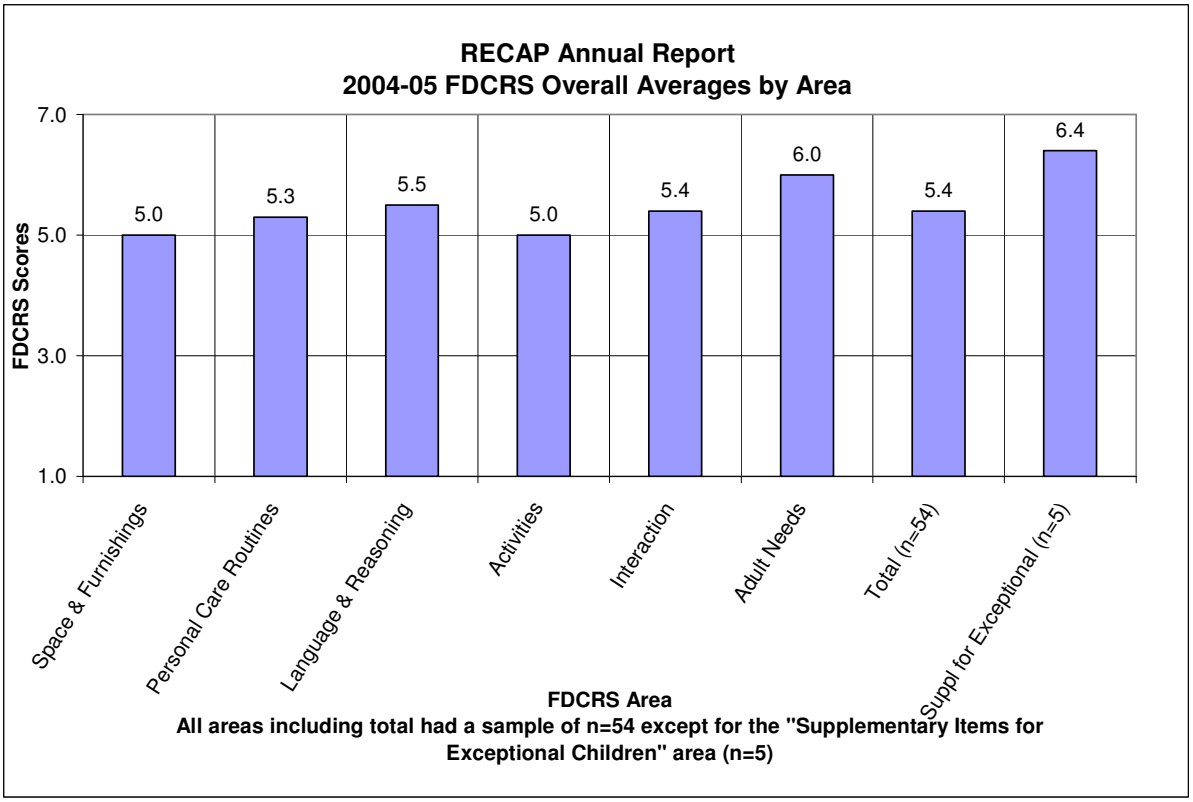


Figure 2 FDCRS area scores

Each of the FDCRS areas in Figure 2 had a sample of 54 observations except for the "Supplementary for Exceptional" area which only had 5 observations.

What is the reliability of the FDCRS?

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

Table 1 below shows the results of the reliability calculations for this 1st year FDCRS observations. The internal reliability (alpha) of the FDCRS was 0.94. The inter-rater reliability was r = 0.83 (n=11 dual observations). Using (a/a+d; a=agreement and d=disagreement) the median inter-rater reliability was 0.63 for exact matches and 0.77 for differences of one point.

Table 1 Reliability of the 2004-2005 FDCRS

Reliability of the 2004-2005 FDCRS	
School Year	**2004-2005**
Internal Reliability	
Internal Reliability - Cronbach's Alpha Value	0.94 (n=54)
Inter-rater Reliability	
Sample size	11
Median Inter-rater Reliability for Exact Matches	0.63
Median Inter-rater Reliability for Differences of One Point Matches	0.77
Total FDCRS Inter-rater Reliability (r)	.83
Space & Furnishings Area	0.27*
Personal Routine – Basic Care Area	0.80
Language and Reasoning Area	0.87
Learning Activities Area	0.97
Interaction – Social Development Area	0.51
Adult Needs Area	0.76

*Note: All reliability statistics are significant at Pr(t)<=.05 except for the Space & Furnishings area.

Follow-up Studies

Follow-up Analysis of RECAP Students

Purpose of Analysis

To compare the 2004-2005 kindergarten performance of students who participated in the 2003-2004 RECAP prekindergarten programs with those students who did not participate in the RECAP programs. The comparison was in terms of 2004-2005 RCSD kindergarten COR scores. This is the second year in a row that we have conducted this analysis.

Summary of Results

The findings of this analysis are that for the overall 2003-2004 RECAP student population, the RECAP students had higher 2004-2005 fall kindergarten COR scores than non-RECAP students. Moreover, in the spring of 2004-2005 this positive effect continued to be present. The COR growth rates between the RECAP and non-RECAP kindergarteners was found to be the same. *This means that the RECAP students started higher and also ended higher in the spring for all 3 COR subscales and total.*

Gender and Race/ethnicity were once again found to be significantly tied to performance on the COR, but not significant when comparing students with RECAP program experience and those without this experience. Participation in the RECAP programs appears to work similarly for all Race/Ethnicity and gender subgroups.

Last year, when completing this analysis, we noticed that a subgroup of 75 White males did not perform quite as well as the other subgroups, when measured by the kindergarten fall and spring COR scores. However, this year we did not see any hint of that earlier result. Quite the contrary, this subgroup (also 75 in number) did as well or better than many of the other subgroups when measured by both their fall and spring COR scores.

Subjects

All students with 2004-2005 RCSD Fall kindergarten COR scores were included in the sample. To determine whether these students had attended RECAP centers the 2003-2004 RECAP information 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, students held out of kindergarten for an additional year or simply that the students' RCSD ID numbers are not known. We had an attrition rate of 57% for the 2003-2004 RECAP students. This means that our follow-up study this year could only track 43% of the 2003-2004 RECAP students.

Table 1 shows the attrition rates for the last 2 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 1 Attrition rates for RECAP follow-up subjects

Attrition in the RECAP Follow-up Subjects		
	In RECAP 2002-03	**In RECAP 2003-2004**
Total RECAP students	2,649	2,887
RECAP students identified in Kindergarten the following year.	1,263	1,229
RECAP not identified in Kindergarten the following year.	1,386	1,658
Attrition Rate	52.3%	57.4%

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 2003-2004 and the group that was not in RECAP.

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

Fall kindergarten COR Subscales

The first MANOVA conducted used the fall 2004-2005 kindergarten COR academic, motor, and social subscales as the dependent variables. The independent variables used were RECAP/non-RECAP experience, gender, race/ethnicity, and all 2-way and 3-way interactions of these variables. The .001 level was used to establish significance for all tests in this report. 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.

The result from the fall MANOVA clearly showed that differences in all three Kindergarten COR subscales were due, in part, to a main effect of RECAP/non-RECAP experience. This effect was found to be statistically significant (Wilks' lambda = 0.989, $F(3,2246) = 8.56$, $p<.001$).

In addition to the main effect for the RECAP/non-RECAP indicator, gender and race/ ethnicity were also found to have significant effects. Just like in last year's follow-up analysis, gender was found to have a significant effect upon fall COR scores (Wilks' lambda = 0.982, $F(3,2246) = 13.70$, $p<.001$), and girls had higher fall COR scores than boys.

Also, much like last year, race/ethnicity was found to have a significant effect on fall COR scores (Wilks' lambda = 0.959, $F(3,4492) = 15.81$, $p<.001$). No 2-way or 3-way interactions of any independent variables were found to be significant this year.

Last year, we noticed that a 3-way interaction resulted in a significant effect in the fall scores. Specifically, the subgroup involving RECAP/White/males appeared to be underachieving in kindergarten last year. However, this year, this subgroup did as well or better than any of the other subgroups when measured by their COR scores.

Fall Kindergarten COR Totals

For the purpose of brevity throughout this report, kindergarten COR totals are graphically displayed if they are consistent with the MANOVA results which analyze the subscales. 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/non-RECAP experience was strongly significant ($F(1,2248)=18.38$, $p<.001$). In addition, the ANOVA results showed that gender ($F(1,2248)=21.00$, $p<.001$) and race/ethnicity ($F(2,2248) = 20.63$, $p<.001$) were also found to be significant. No 2-way or 3-way interactions of these independent variables were found to be significant in the fall data this year.

Figure 1 below displays the differences between RECAP students and non-RECAP students. Figure 2 displays the kindergarten scores in the fall and spring by demographics.

Spring Kindergarten COR Subscales

The next analysis conducted was to examine the effects of RECAP on spring kindergarten COR results. The MANOVA described earlier for the fall kindergarten COR scores was repeated using the spring 2004-2005 kindergarten academic, motor, and social COR subscales as the dependent variables.

The result from the spring MANOVA clearly showed that differences in all three Kindergarten COR subscales were due, in part, to a main effect of RECAP/non-RECAP experience. This effect was found to be statistically significant (Wilks' lambda = 0.981, $F(3,2242) = 14.20$, $p<.001$). This result means that the "jump start" that RECAP students had in the fall of their kindergarten year was maintained and they still had that advantage in the spring of 2005.

In addition to the main effect for the RECAP/non-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 = 0.973, F(3,2242) = 20.54, p<.001), and girls had higher spring COR scores than boys.

Also, like last year, race/ethnicity was found to have a significant effect on fall COR scores (Wilks' lambda = 0.975, F(6,4484) = 9.89, p<.001). No 2-way or 3-way interactions of these independent variables were found to be significant in the fall data this year.

Spring Kindergarten COR Totals

An Analysis of Variance was performed using COR totals. The results of this ANOVA were consistent with the MANOVA. That is, the main effect of RECAP/non-RECAP experience was definitely significant (F(1,2248)=3.44, p<.0001). In addition, gender (F(1,2248)=21.00, p<.0001) and race/ethnicity effects (F(2,2248)=20.63, p<.0001) were also significant in the spring. Just like in the fall COR totals MANOVA results, the spring COR ANOVA results showed that no 2-way and 3-way interactions were significant this year.

Figure 1 below shows the differences between RECAP students and non-RECAP students in the fall and spring. Figure 2 displays the kindergarten scores in the fall and spring by demographics.

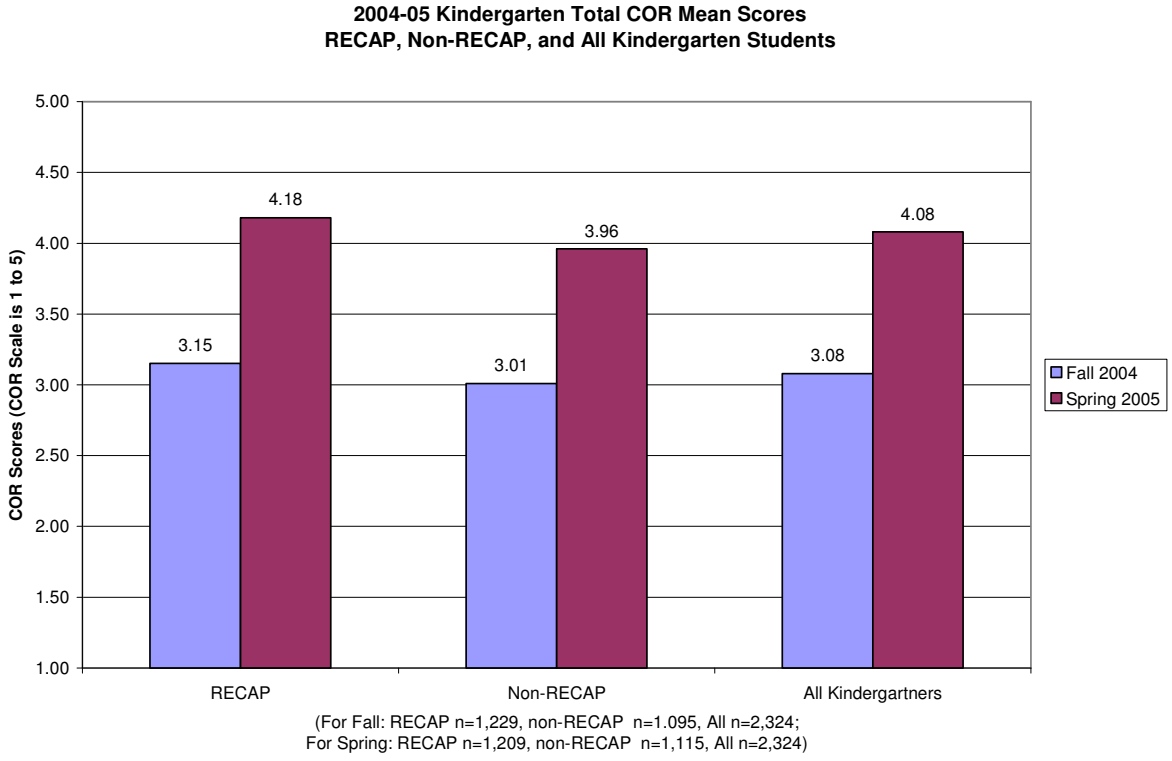


Figure 1 2004-2005 Kindergarten Total COR Mean Scores

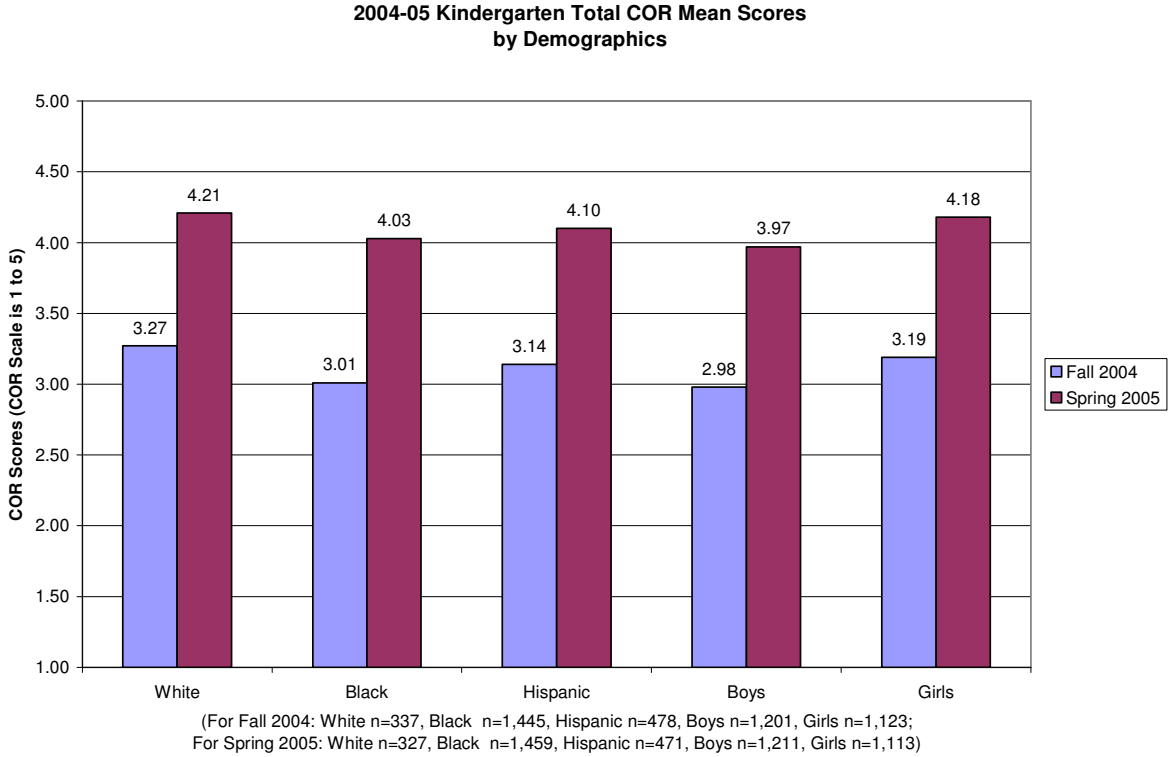


Figure 2 2004-2005 Kindergarten Total COR Mean Scores by Demographics

Growth in Kindergarten COR Subscales

The MANOVAs described above for the fall and spring kindergarten COR scores were repeated using the changes in 2004-2005 kindergarten COR subscales as the dependent variables. The kindergarten COR change scores differences due to the main effect of RECAP/non-RECAP experience were not found to be significant (Wilks' lambda=0.999, F(3,2113)=0.64, p>.001). In addition, differences due to gender (Wilks' lambda=0.999, F(3,2113)=0.60, p>.001) and race/ethnicity (Wilks' lambda=0.993, F(6,4226)=0.64, p>.001) were not significant. Also, there were no 2-way or 3-way interactions found to be significant.

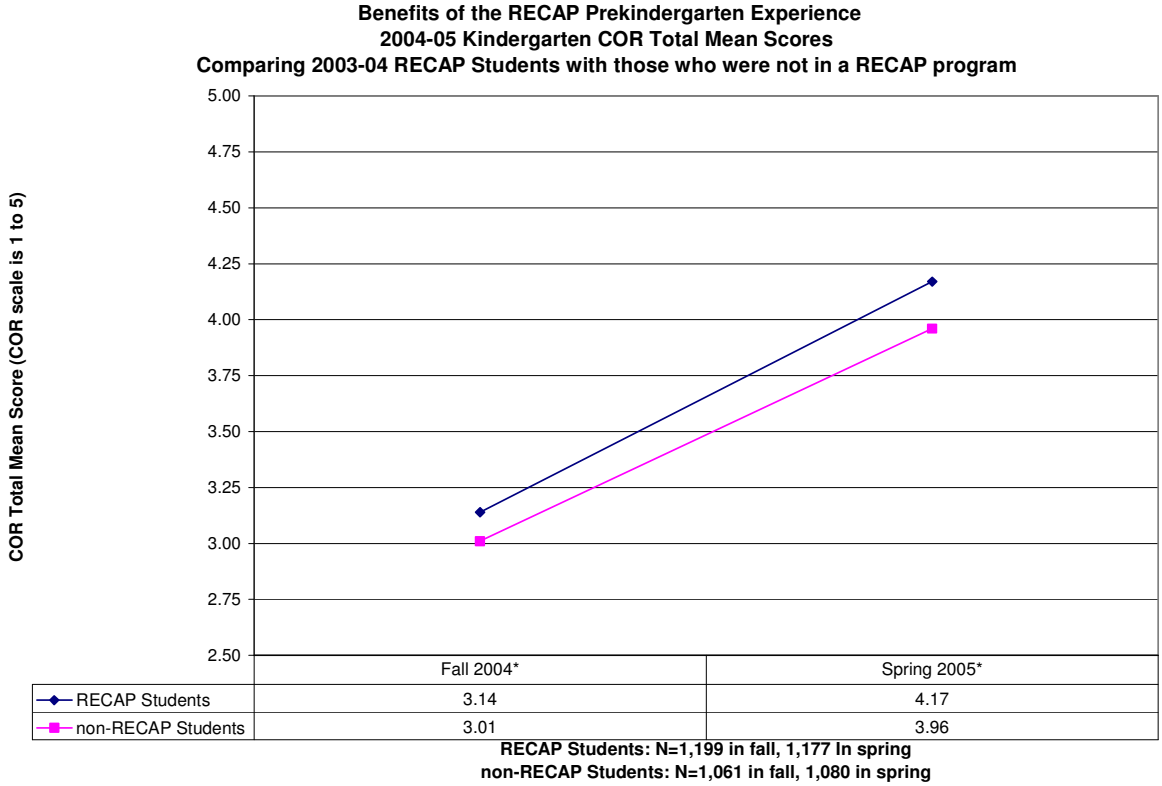
Comparing the mean changes among groups

The mean kindergarten COR change score for RECAP students this year was 1.03. The mean kindergarten COR change score for non-RECAP students was 0.95. This difference was not significant. The significance of these results suggests that RECAP students start off with higher scores in the fall, and the non-RECAP students are not catching up to the RECAP students by the spring of 2005. Figure 3 shows these differences in graphical form.

What do all of these statistical results mean?

In general, in the fall of 2004-2005, the kindergarten students with RECAP experience outperformed students without RECAP classroom experience in their fall COR scores. The students with experience in RECAP programs also outperformed students without RECAP

classroom experience in their spring COR scores. There was no difference in the growth rates between the groups for the RECAP versus non-RECAP group difference.

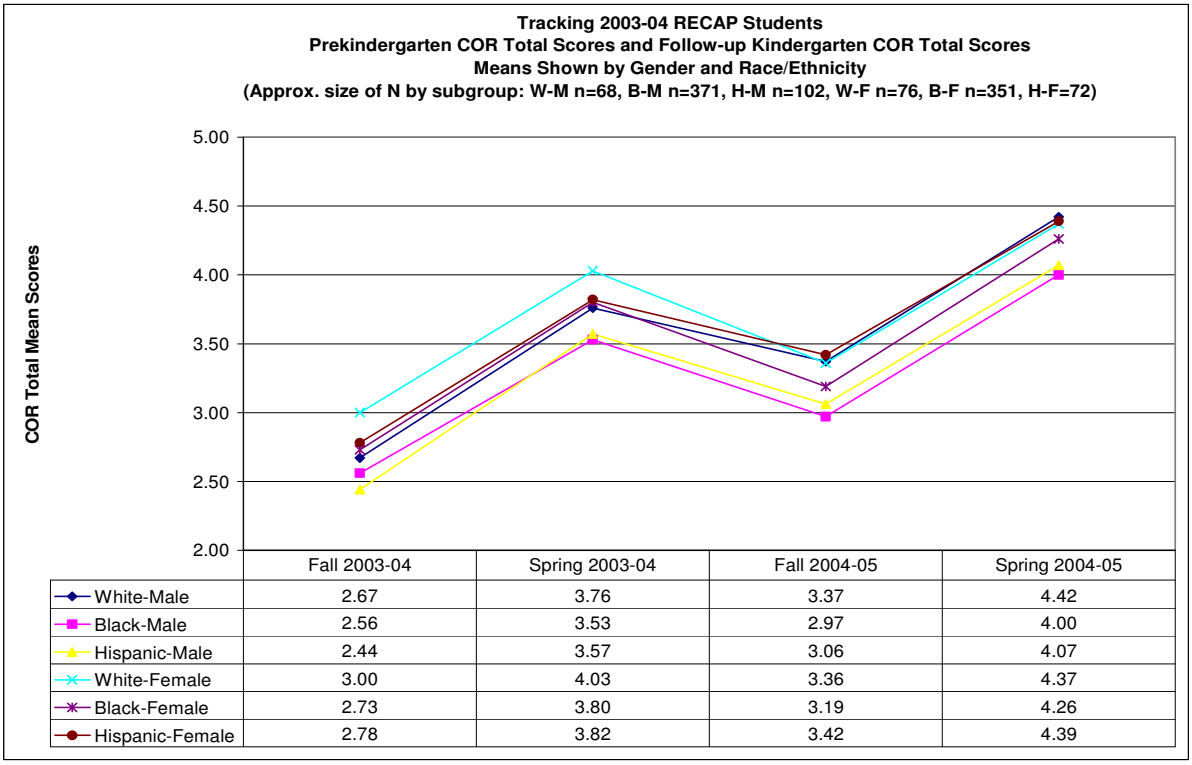


Note: * Signifies differences of group means significant at Pr(t) <= .001
Statistical results based on two ANOVAs; for the Fall 2004 and Spring 2005, respectively

Figure 3 Benefits of the RECAP classroom experience as measured in the fall and spring of 2004-2005.

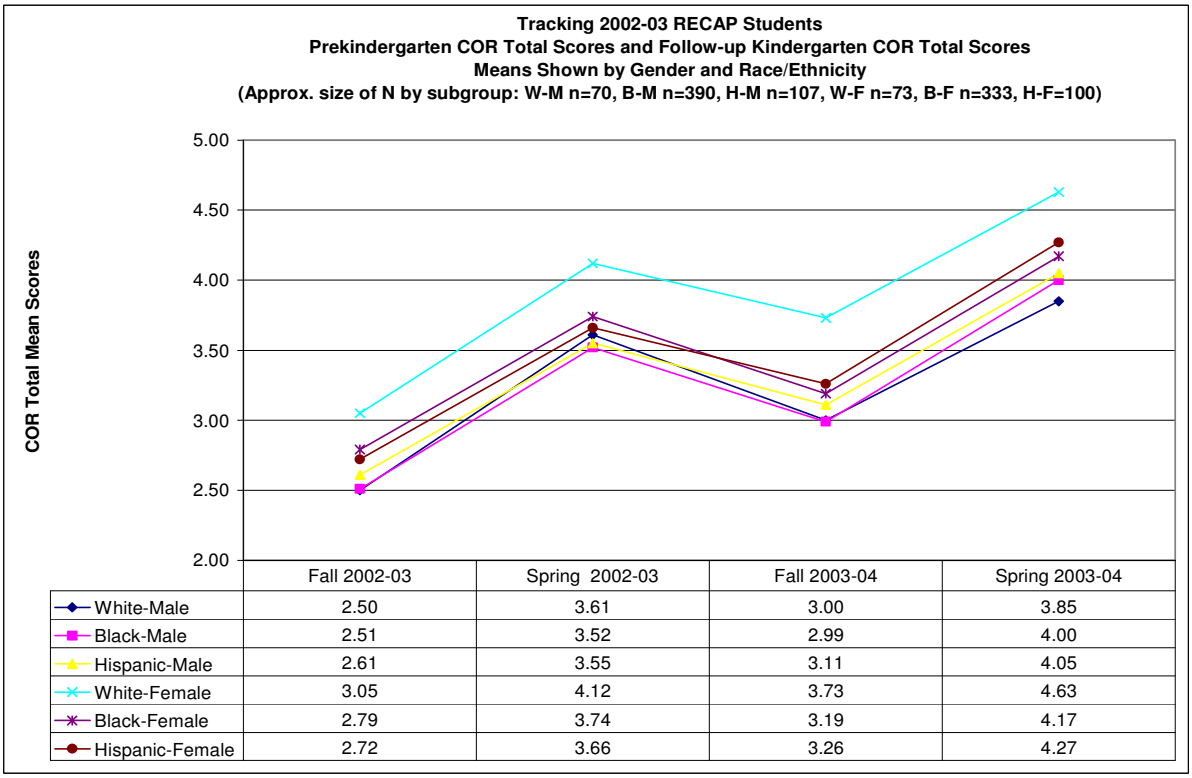
Tracking 2003-2004 RECAP students through exiting 2004-2005 Kindergarten

An interesting sidelight to this follow-up analysis can be seen in Figures 4a and 4b. The Figure 4a graph shows how the 2003-2004 RECAP students mean total COR scores tracked from entering prekindergarten through exiting kindergarten. For comparison purposes, the Figure 4b graph shows how the 2002-03 RECAP students tracked through kindergarten last year. It is quite noticeable that the subgroup of White females outpaced all other subgroups for the entire 2 year period, 2 years in a row. In general, the females of all races/ethnicities outgained the males throughout the two year period. It can be seen by comparing Figures 4a and 4b that these patterns have now repeated for the last 2 years.



	Fall 2003-04	Spring 2003-04	Fall 2004-05	Spring 2004-05
White-Male	2.67	3.76	3.37	4.42
Black-Male	2.56	3.53	2.97	4.00
Hispanic-Male	2.44	3.57	3.06	4.07
White-Female	3.00	4.03	3.36	4.37
Black-Female	2.73	3.80	3.19	4.26
Hispanic-Female	2.78	3.82	3.42	4.39

Figure 4a COR Total and Follow-up kindergarten COR Total Scores for 2003-2004 RECAP Students Only



	Fall 2002-03	Spring 2002-03	Fall 2003-04	Spring 2003-04
White-Male	2.50	3.61	3.00	3.85
Black-Male	2.51	3.52	2.99	4.00
Hispanic-Male	2.61	3.55	3.11	4.05
White-Female	3.05	4.12	3.73	4.63
Black-Female	2.79	3.74	3.19	4.17
Hispanic-Female	2.72	3.66	3.26	4.27

Figure 4b COR Total and Follow-up kindergarten COR Total Scores for 2002-03 RECAP Students Only

By tracking the total COR scores in Figures 4a, we can see that there was a noticeable dip in COR scores over the summer. The only changes between the spring of 2003 and the fall of 2004 are a different teacher performing the kindergarten COR observations, the student having had three months of summer vacation experience, and the child being three months older. 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 4a and 4b it can be seen that these patterns have now repeated for the last 2 years.

Discussion:

An area to investigate for future research might be whether the non-RECAP students in our analyses participated in some special program outside of RECAP. It is possible that some of them may have been in other pre-school programs.

Also, for future research, we might use responses to a question in our PACE questionnaire (Children's Institute survey for parents of students entering kindergarten) asking in what other pre-school programs did the child participate.

As mentioned earlier, we had an attrition rate of 57% in our initial RECAP 2003-2004 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?

Pre-K Children with Disabilities (New Section)

Results from a RECAP Study of Pre-K Students with Disabilities, 2002-2005

The First Six Key Overall Findings

These findings on the state of Rochester Pre-K students classified with a disability (as per State laws, no types of disabilities are specified until entrance into the "school age" system at age 5, which is a sound practice, given this age group), 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 (within the City of Rochester; as per state laws, RCSD is responsible for all Pre-K classification and placement) participate in programs evaluated by RECAP. Three years of data yield nearly 600 students. This is good news, as it indicates (with obvious exceptions) that we will be able to make informed policy decisions, because multi-year data should be fairly reliable. This is a preliminary conclusion.

2. The boy-girl gap, which we know is large for this population (a fact born out by a wealth of national and local studies), is even larger than anticipated: nearly a three-to-one ratio (nearly 75% 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 make gains commensurate with those of the general education population. As a whole, they appear to be neither gaining nor losing ground 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.

5. We do have the ability to follow students both forwards and backwards. (For example, what happened to children who were classified as Learning Disabled? How do they perform in later years? What about children who are declassified when they enter kindergarten?)

6. We must keep in mind that we will not know the actual classifications these students will receive until they enter kindergarten. We know there will be broad variations. But we may be able to determine where our Pre-K Special Education programs are most effective, where the greatest needs are and where to allocate resources and staff development.

In-depth Special Services Data

Data Provided by the RCSD Research & Evaluation Group

Table 1

Number of RECAP Children that Required One or More Special Services for a Disability

Includes All Ages of RECAP Children

	2002-03		2003-2004		2004-2005*	
Primary Service**	**Counts**	**Pct. (%)**	**Counts**	**Pct. (%)**	**Counts**	**Pct. (%)**
SL - Speech/Language Therapy	109	5%	118	7%	93	5%
IS - Integrated Special Class (PreSch)	69	3	67	4	53	3
IT - Itinerant Special Ed. Teacher (PreSch)	19	1	22	1	17	1
OT - Occupational Therapy	5	0	4	0	4	0
PT - Physical Therapy	0	0	3	0	0	0
SC3 - Special Class 12:1+1	1	0	0	0	1	0
SC8 - Special Class 8:1+(3:1)	1	0	2	0	1	0
VH – Itinerant Vision Services	2	0	0	0	0	0
CT – Consultant Teacher	0	0	0	0	1	0
Totals for students (from rows above) with a primary service identified.	206	9%	216	12%	170	9%
Totals for students with no primary service identified	1,904	91%	1,543	88%	1,740	91%
Total RECAP students with a RCSD ID.	2,109	-	1,759	-	1,910	-

Notes:

- (%) Signifies percentage calculated as counts divided by Total RECAP students with a RCSD ID row.
- * Signifies that 2004-2005 is not yet complete, updated through January, 2005.
- ** Primary Service means that for each child that required one or more special services for a disability, a primary service was indicated. This is that primary service for each child.

Table 2						
The Number of Unique Types of Service Provided for Each Child						
Includes All Ages of RECAP Children						
	2002-03		**2003-2004**		**2004-2005**	
Number of Unique Types of Service	**Frequency**	**Percent (%)**	**Frequency**	**Percent (%)**	**Frequency**	**Percent (%)**
0	1,903	90%	1,543	88%	1,740	91%
1	91	4	115	7	83	4
2	74	4	66	4	47	2
3	25	1	24	1	28	1
4	13	1	9	0	8	0
5	1	0	1	0	3	0
6	2	0	1	0	1	0
total	2,109	-	1,759	-	1,910	-

Notes:

- (%) Signifies percentage of frequency column total

Table 3					
2002-03 Demographic Information for the RECAP Students Identified as Pre-k Children with Disabilities					
Including Only 3 and 4 Year-olds					
Special Services = Child having 1 or more special services during the school year					
	Special Services (%)		**No Special Services (%)**		
Race/Ethnicity**	**Boys***	**Girls**	**Boys***	**Girls**	**Total**
White ²	15 (13)	5 (13)	89 (14)	116 (17)	225
Black ²	71 (62)	28 (70)	417 (65)	408 (59)	924
Hispanic ²	24 (22)	5 (13)	104 (16)	114 (17)	247
Other	4 (4)	2 (5)	31 (5)	49 (7)	86
Total	114	40	641	687	1,482

Notes:

- (%) Signifies percentage column total
- * Signifies Chi-square test for gender with special services was significant (Pearson $\chi^2 = 44.125$, $p<.05$).
- ** Signifies Chi-square test on race/ethnicity with special services was not significant. (Pearson $\chi^2 = 2.209$, $p>.05$).
- ² Signifies Chi-square tests on interactions of race/ethnicity and gender with special services were significant for White, Black, and Hispanic males. (Pearson $\chi^2 = 7.313$, $p<.05$ for White-males, Pearson $\chi^2 = 15.899$, $p<.05$ for Black-males, Pearson $\chi^2 = 12.596$, $p<.05$ for Hispanic-males).

Table 4					
2003-2004 Demographic Information for the RECAP Students Identified as Pre-k Children with Disabilities					
Including Only 3 and 4 Year-olds					
Special Services = Child having 1 or more special services during the school year					
	Special Services (%)		**No Special Services (%)**		
Race/Ethnicity**	**Boys***	**Girls**	**Boys***	**Girls**	**Total**
White [2]	16 (15)	10 (23)	79 (14)	99 (16)	97
Black [2]	58 (56)	25 (58)	324 (58)	374 (62)	366
Hispanic [2]	25 (24)	6 (14)	110 (20)	95 (16)	112
Other	5 (5)	2 (5)	43 (8)	40 (7)	53
Total	104	43	556	608	1,311

Notes:

- (%) Signifies percentage of column total
- * Signifies Chi-square test for gender with special services was significant (Pearson $\chi^2 = 31.250$, $p<.05$).
- ** Signifies Chi-square test on race/ethnicity with special services was not significant. (Pearson $\chi^2 = 2.693$, $p>.05$).
- [2] Signifies Chi-square tests on interactions of race/ethnicity and gender with special services were significant for Black and Hispanic males. (Pearson $\chi^2 = 16.340$, $p<.05$ for Black-males, Pearson $\chi^2 = 8.011$, $p<.05$ for Hispanic-males).

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

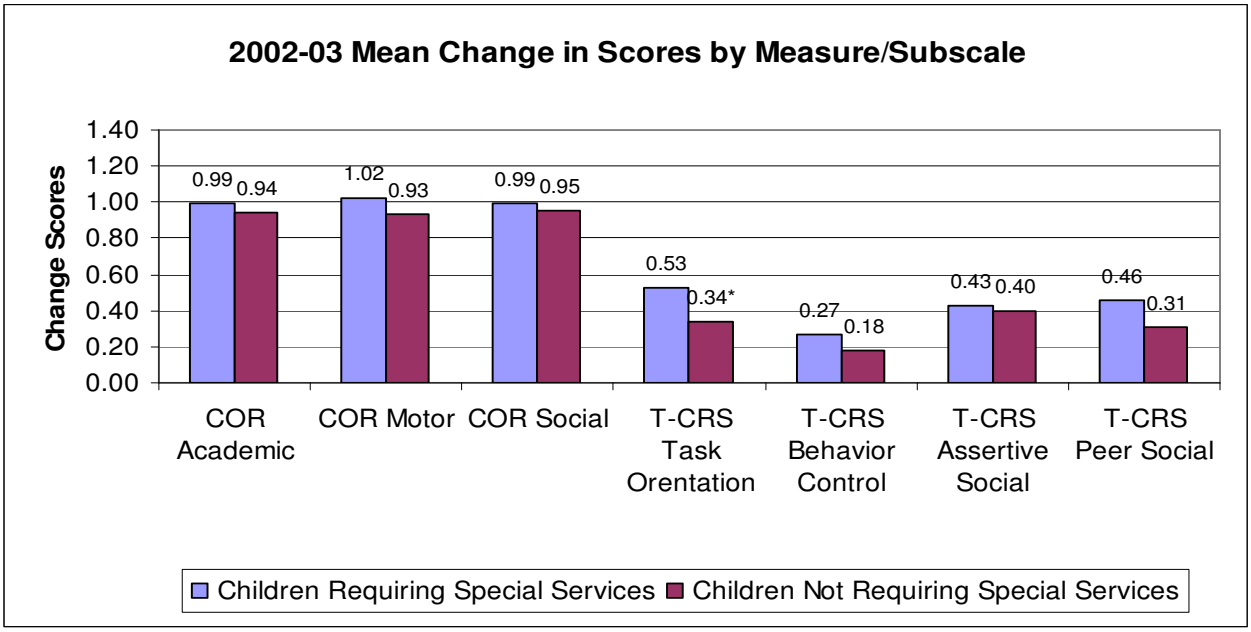


Figure 1 2002-03 COR and T-CRS Change Scores

Note: * Signifies that this group difference is significant at Pr(t) <= .01

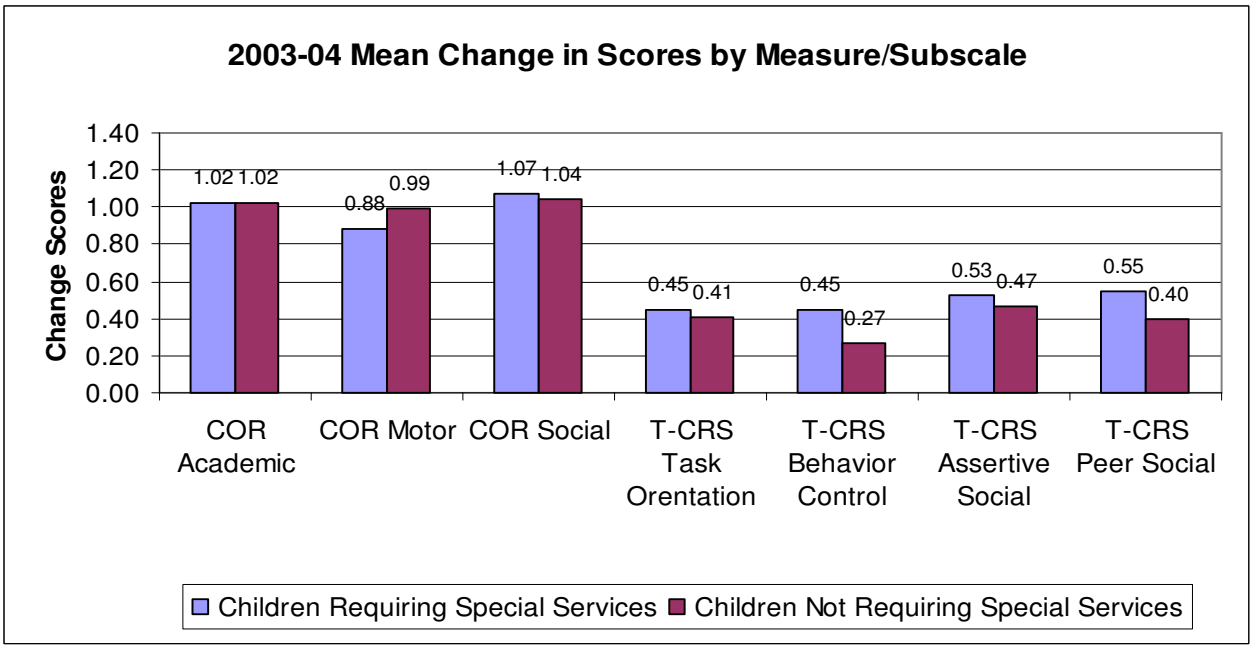


Figure 2 2003-2004 COR and T-CRS Change Scores

Note: None of the group differences in this bar chart are significant at Pr(t) <= .01

Additional graphs and tables presenting Pre-k Children with Disabilities data have been included in Appendix F in the RECAP Report Statistical Supplement.

Children's Health Information

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 1,718 children in 2004-2005 (63% of all RECAP pupils), generally (86%) by the child's mother.

The following are some highlights in these findings: 31% of entering Pre-K pupils have never visited a dentist (38% last year); we are witnessing very high rates of asthma, with 18% of pupils' physicians reporting asthma; 12% of entering Pre-K pupils have been hospitalized for asthma in the past year; and approximately 28% 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. These data are used to provide a demographic "snapshot" of the CHI sample. Items in this section include:

a. Child's race/ethnicity: 64% of the children were Black/African-American; 16% were White/Non-Hispanic and 20% were Latino/Hispanic (up from 18% last year).

b. Child's home zip code: Over 70% of the children this year were from 6 zip codes: 14621, 14609, 14611, 14613, 14605, and 14619.

c. Whether the child has a doctor and/or a dentist: 31% of the children were reported to not have a dentist (38% last year), whereas only 2% did not have a 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 (36%); the second most common included both parents[1] and no other adults (28%).

e. Child's health insurance status: 97% of children in the sample had medical insurance coverage (up from 96% last year). 70% of the children had either Medicaid or Child Health Plus insurance (up 4% from last year).

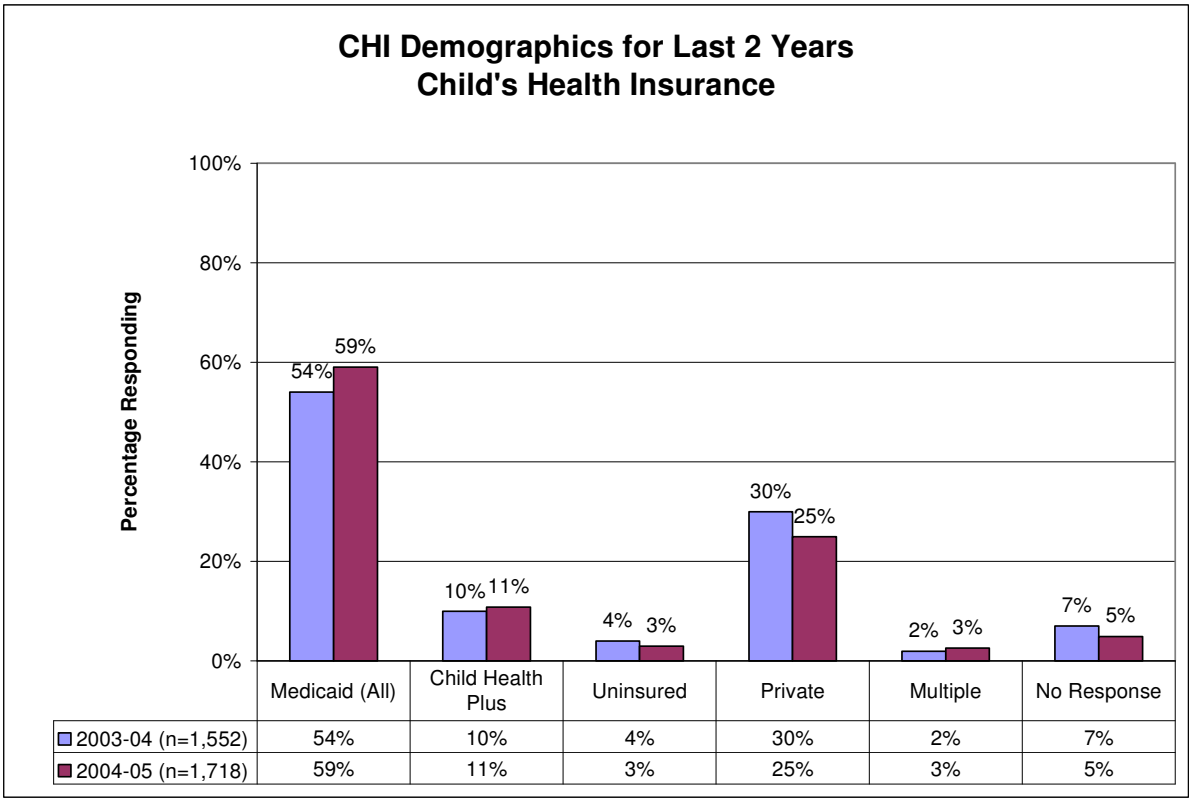


Figure 1 CHI Demographics Child's Health Insurance

f. In the 2004-2005 survey results, regarding the ages of the mothers and fathers: 26% 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 26% of fathers.

[1] Throughout this report, we have used the term 'parent' to indicate the person completing the CHI. Actually, 6% of the respondents were not the parent, although most of these were other relatives.

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

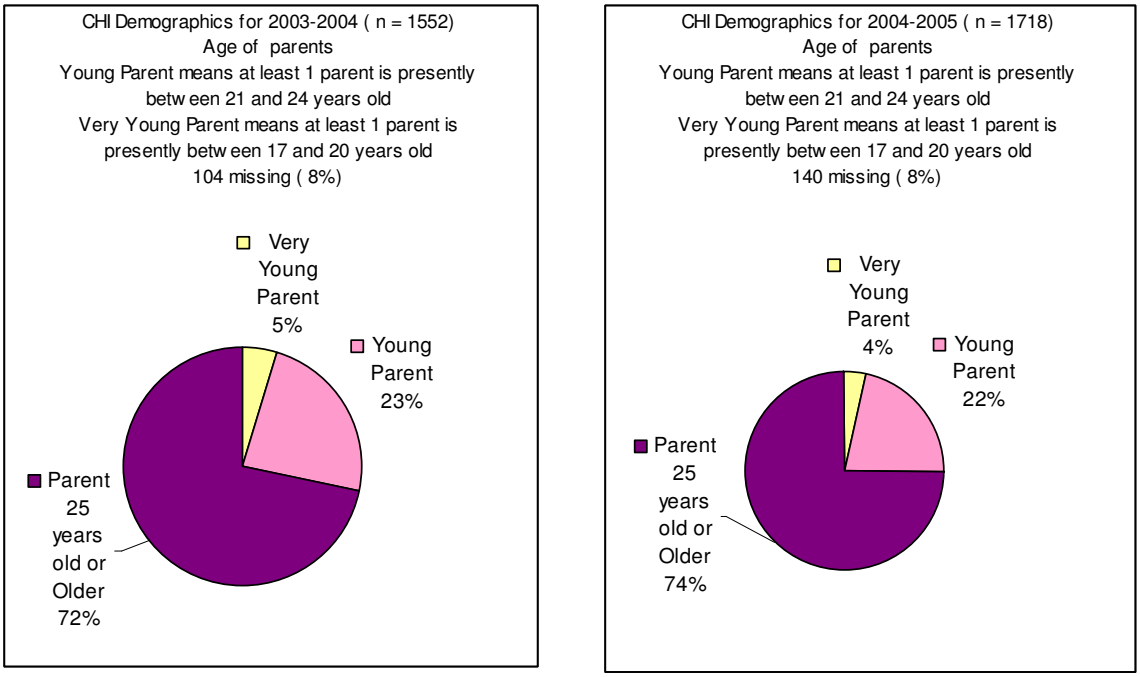


Figure 2 CHI Demographics: Age of Parents

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

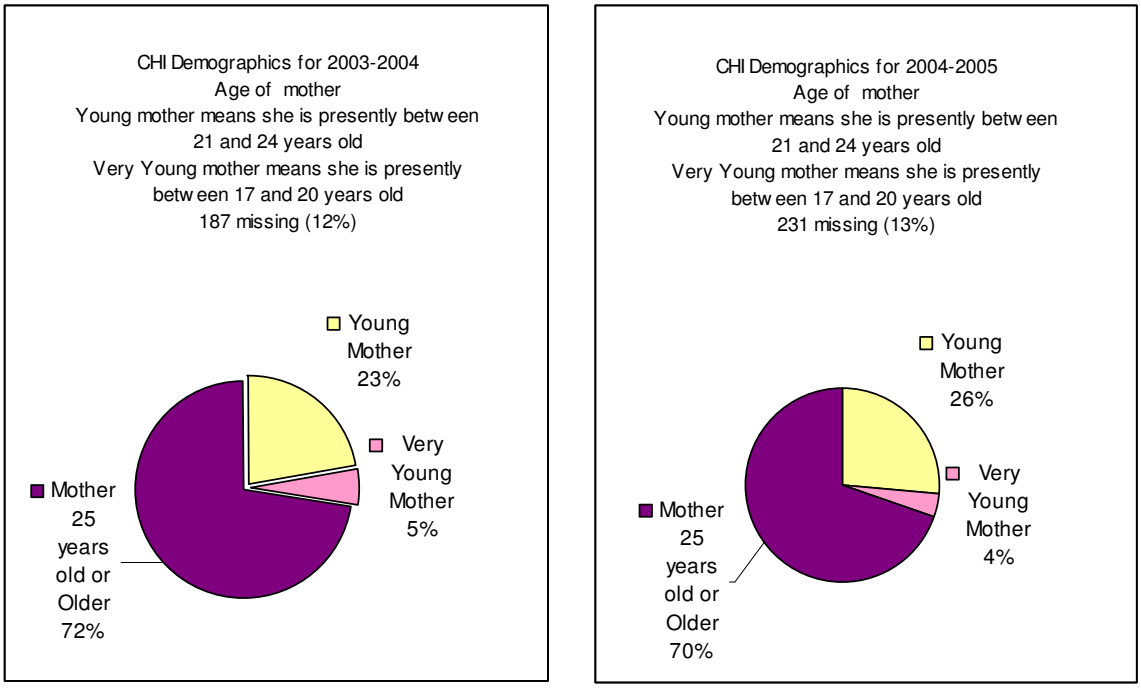


Figure 3 CHI Demographics: Age of Mother

g. The mother's/father's highest completed level of education: Of those who answered, 77% of both mothers and fathers had at least a high school education or had obtained a GED. This information was not provided for 17% of mothers and 30% of fathers. For both mothers and fathers, 7% 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. Parents indicated that 31% of the children have never been seen by a dentist in 2004-2005. In 2003-2004 this percentage was 38%. It is recommended by the American Academy of Pediatricians that children start seeing a dentist at age 18 months. Only 1% have never been to a doctor.

b. Children's illnesses, past and present, covered a wide range of syndromes. Identified were 8% who had recurrent ear infections (down from 12% in 2003-2004), 6% with behavior problems, 4% with "low iron" (iron deficiency), and 5% who have already had early intervention services.

c. 27% of the children had experienced a health condition which required emergency medical attention. Among the reported emergencies, 10% were related to asthma. Fourteen percent of parents reported that their child was taking at least one prescription medication.

d. 22% of the children this year had one or more allergies, including 10% seasonal, 5% medication, and 4% food allergies. Last year the percentages were: 23% of the children had one or more allergies, including 9% seasonal, 5% medication, and 5% food allergies.

e. 13% of the children had been hospitalized at least overnight; this was the same as last year.

f. 97% of the children, according to parents in 2004-2005, are in good or excellent overall health. This percentage last year was 96%. Three percent of the parents reported that they would like to talk to the school nurse about their child's health. This percentage was 4% last year (survey item #14).

g. High Lead levels:
5% 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 in the 14608 (10%), 14619 (7%), and 14609 (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 two years.

Table 1 High Lead Response by Zip Code

High Lead Responses by Zip Code for Last 2 Years						
	2003-04			2004-05		
Zip Code*	Zip Code Student Count	High Lead Count	Percent	Zip Code Student Count	High Lead Count	Percent**
14608	109	10	9%	97	10	10%
14619	117	6	5%	103	7	7%
14609	218	8	4%	282	16	6%
14611	142	8	6%	150	8	5%
14613	72	5	7%	107	4	4%
14605	117	3	3%	105	4	4%
14621	243	8	3%	292	12	4%
14606	61	2	3%	66	2	3%
14620	85	4	5%	84	2	2%
14615	65	1	2%	41	1	2%
Total	1229	55	4%	1327	66	5%

Note: * This table only includes zip codes with Student Count > 40 students.
**The rows in this table are sorted in descending order by the 2004-05 Percent column.

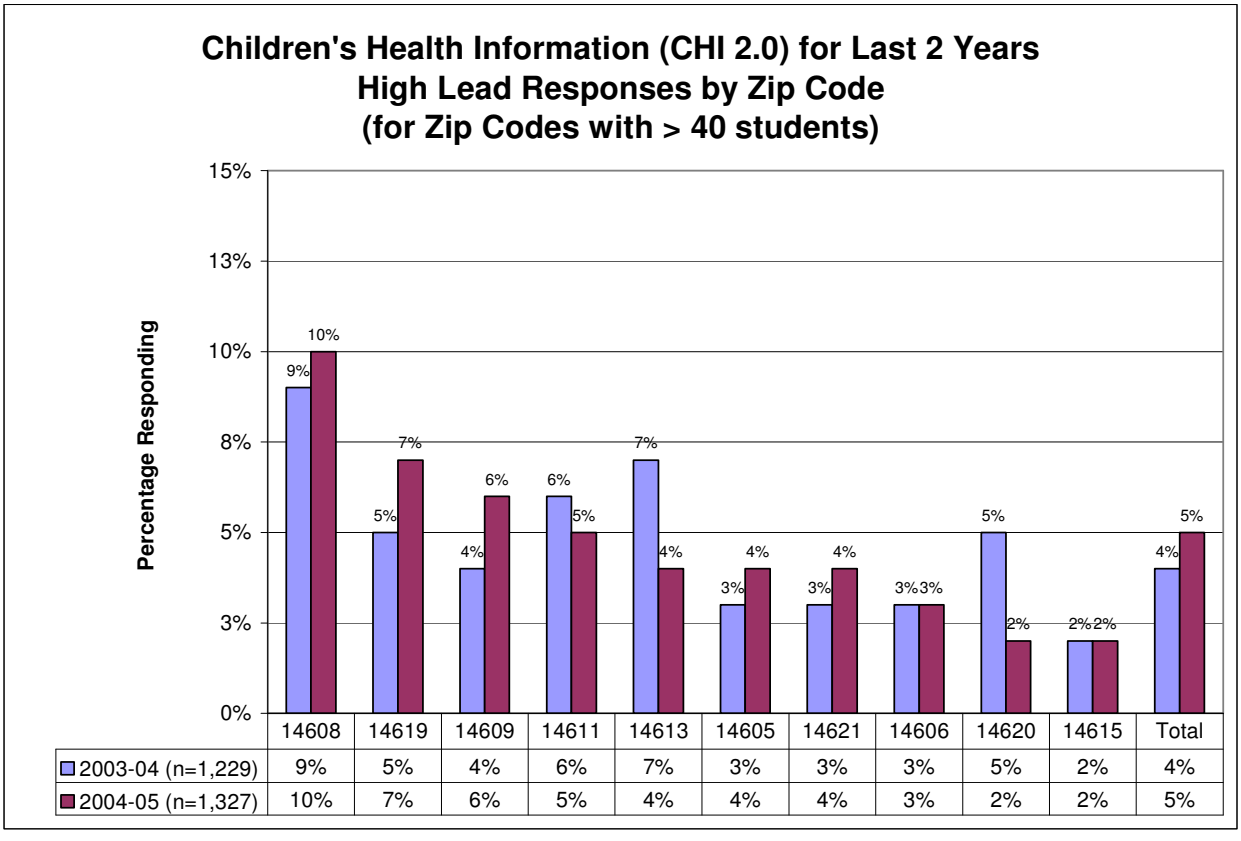


Figure 4 High Lead Responses by Zip Code

h. Asthma:
Several items specifically pertain to asthma and breathing problems**.** Overall, 18% of the children were reported to have asthma. Tabled below are more detailed results:

Table 2 Asthma and Breathing Problems

Asthma and Breathing Problems for Last 2 Years			
Item Number	**Description**	**2003-2004**	**2004-2005**
6	Child needs to stop playing because of breathing problems.	8%	8%
7	At least 1 day a week child usually has wheezing, coughing, or shortness of breath.	12%	11%
8	At least 1 day a week child usually wakes up from sleep because of wheezing, coughing, or shortness of breath.	7%	7%
9	Doctor has said that child has asthma.	19%	18%
9a	Child takes medication every day to prevent asthma symptoms.	8%	8%
9b	Over the past 12 months at least 1 time child needed emergency medical visit for asthma.	12%	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/she wheezes, coughs, or is short of breathe 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/she wheezes, coughs or is short of breath fewer than 3 times a week and does not wake up with these symptoms. Six percent of the children, this past year, had significant asthma symptoms (up from 5% last year); 11% had mild or past asthma; and 1% had indeterminate asthma symptoms.

Table 3 Asthma Severity

Item 7: How many days a week does your child usually have wheezing, coughing, or shortness of breath?	**2003-04**		**2004-05**	
	N	**Percent**	**N**	**Percent**
None	1314	88%	1470	89%
One	91	6%	92	6%
Two	47	3%	46	3%
Three	21	1%	22	1%
4 or more days	20	1%	22	1%
No response	59	4%	66	4%
# responses	1493	96%	1652	96%
Total returned surveys	1552		1718	

Table 4a Breathing Problems

Asthma Severity Scale	2003-04		2004-05	
	N	Percent	N	Percent
Indeterminate Asthma	14	1%	14	1%
Significant Asthma	82	5%	93	6%
Mild or Past Asthma	193	13%	190	11%
Item #9 Has a doctor ever said your child has asthma?	289	19%	297	18%
Actual responses	1510		1671	
Non-Responses	42	3%	47	3%
Total surveys	1552		1718	

Table 4b Additional Breathing Problem s

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	
	N	Percent	N	Percent
None	1397	93%	1537	93%
One	53	4%	51	3%
Two	27	2%	37	2%
Three	11	1%	20	1%
4 or more days	10	1%	9	1%
No response	54	3%	64	4%
# responses	1498	97%	1654	96%
Total returned surveys	1552		1718	

i. Smoking in the child's home:
According to the 2004-2005 respondents, 64% stated no one smoked in the child's homes, compared to 65% in last year's survey.

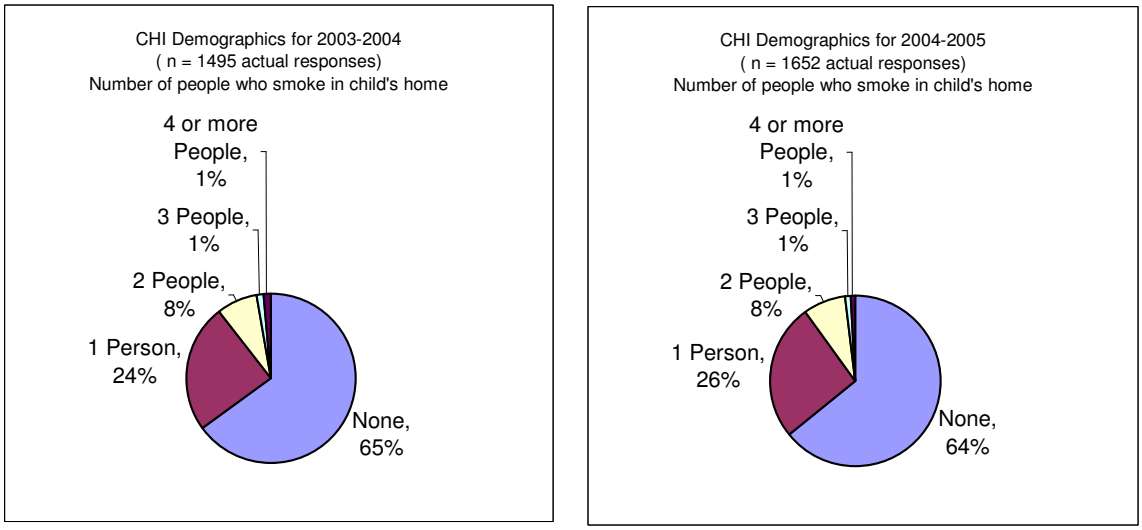


Figure 5 Smoking in the Home

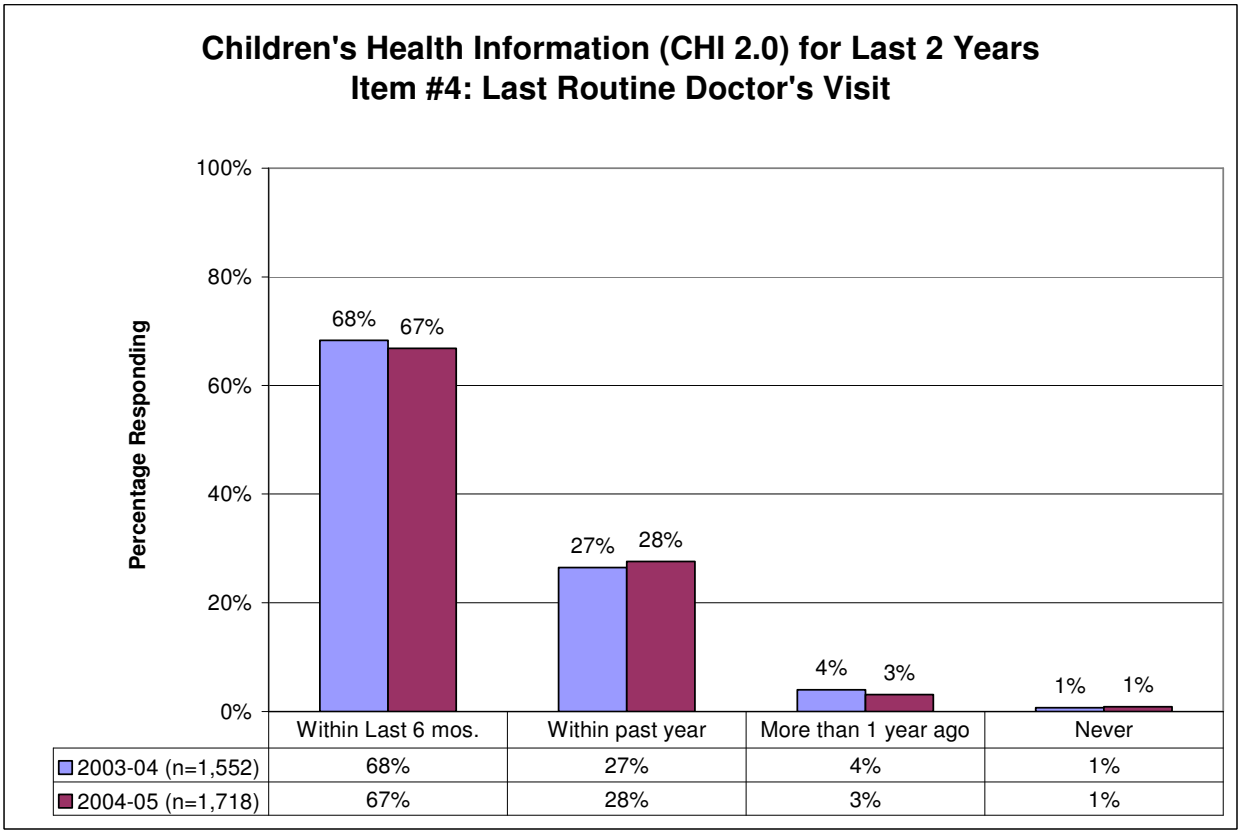


Figure 7 CHI Health Information: Medical Doctor Visits

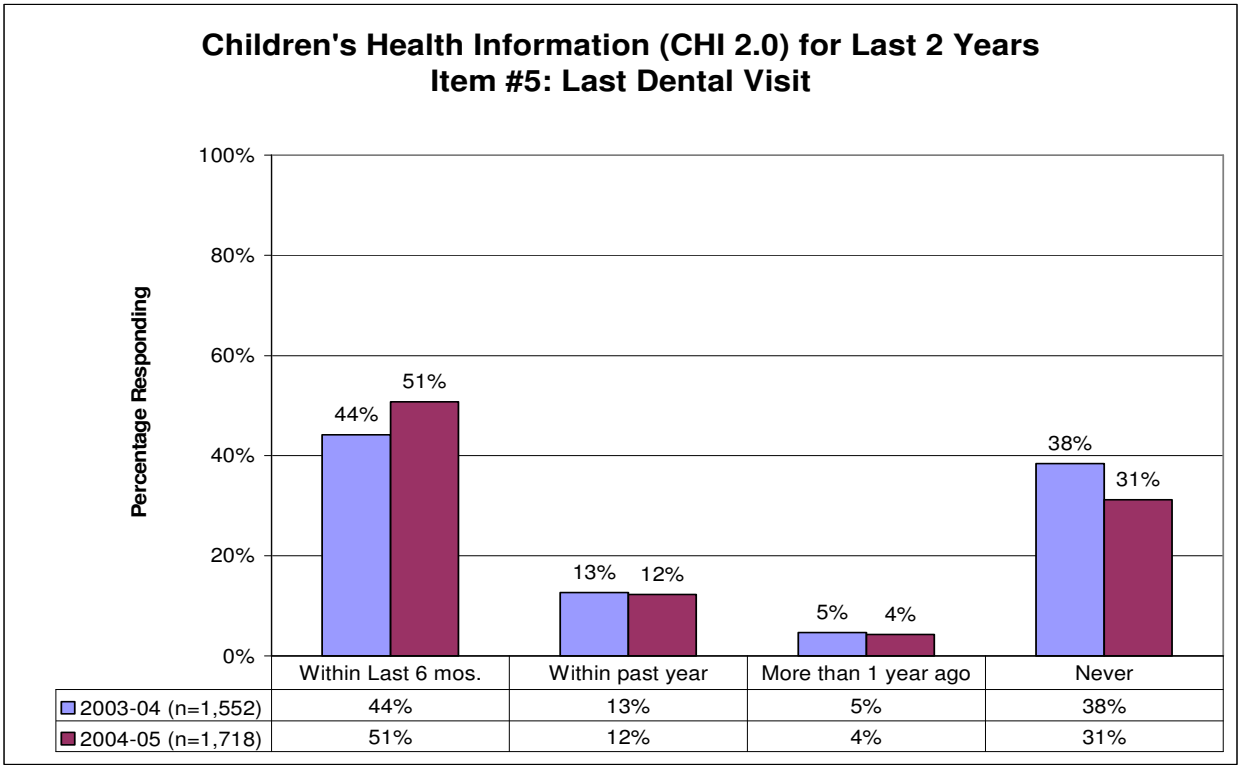


Figure 8 CHI Health Information: Dental Visits

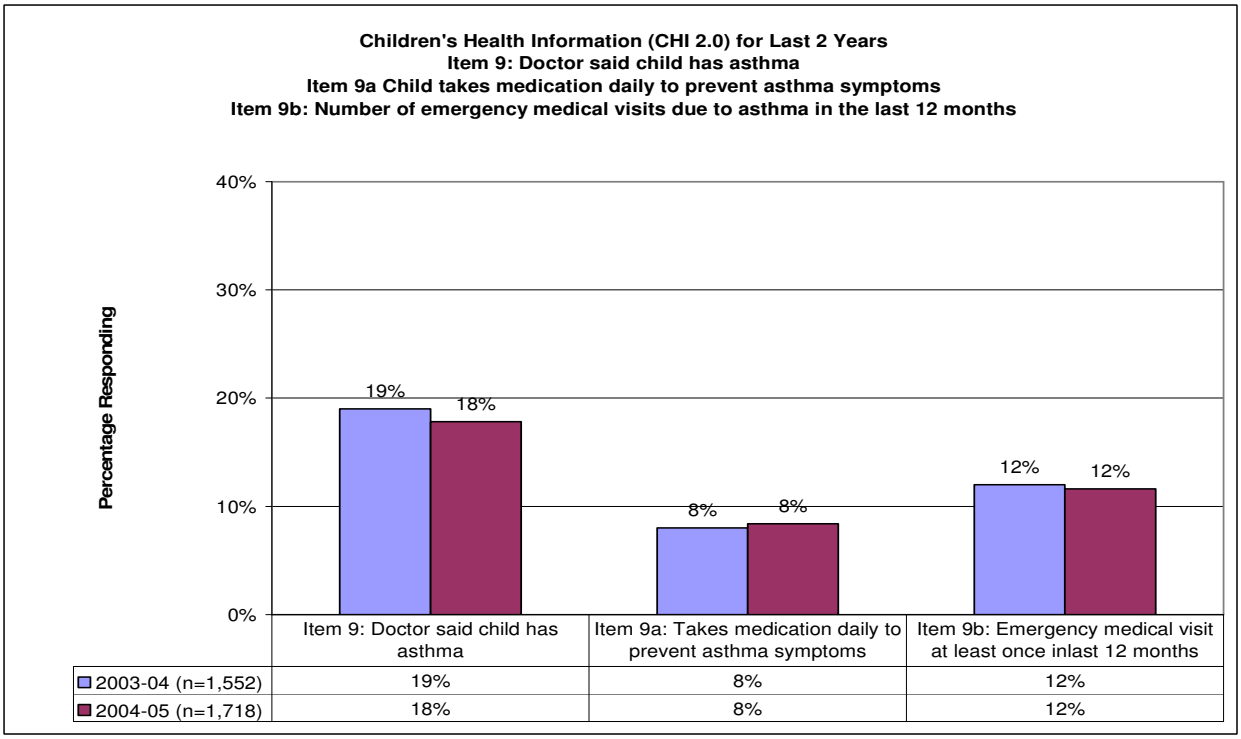


Figure 9 CHI Health Information: Asthma

Additional graphs and tables presenting Children's Health Information data have been included in Appendix E in the RECAP Report Statistical Supplement.

Linking CHI Data with Children's Outcomes

Purpose of Analysis

Exploratory analyses were performed using Children's Health Information (CHI) data, for the purpose of examining some links, if any, between parents answers on the CHI form and the student's performance in COR and T-CRS measures.

2004-2005 Fall COR Score Results

From the t-test results in Table 5a, it can be seen that the parent's responses to certain questions on the CHI form are related to the student's fall COR total score. That is, if students had high lead level (-0.24 difference in COR scores between groups), iron deficiency (-0.30 difference), or asthma (-0.14 difference) as diagnosed by a doctor, there was a significant negative difference in the fall total COR scores for these students, compared to students that did not have these problems. Also, significant differences between group means was found if the parent responded in the CHI that he/she would like to talk to someone about their child's problems for any of seven different problem areas; and responded to either "one or more," or "two or more" of these problem areas.

Table 5b below, which is based on last year's data, is included for comparison purposes. The responses for high lead levels and about asking parents if they would like to talk to someone about their child's problems for any of seven different problem areas showed consistent results for the last 2 years.

Table 5a 2004-2005 Group Differences as Measured by Fall COR Total Scores

2004-05 Health Problems and Child Outcomes t-Tests for Children with and without Health Problems Indicated in CHI Group Differences as Measured by Fall COR Total Scores									
	Students with Health Problem Indicated				Students without Health Problem Indicated				t-tests on Group Mean Differences
Health Problems Indicated in CHI by Parent	n	Mean	Std Dev		n	Mean	Std Dev		Differences in Means
High Lead Levels (Question 11h)	55	2.17	0.79		1130	2.42	0.73		**-0.24***
Behavior Problems (Question 11a)	67	2.27	0.80		1118	2.41	0.73		-0.13
Early Intervention Services (Question 11d)	60	2.26	0.81		1125	2.41	0.73		-0.15
Ear Infections - 6 or more (Question 11c)	96	2.41	0.82		1089	2.41	0.73		0.00
"Low iron" or iron deficiency (Question 11j)	42	2.12	0.69		1143	2.42	0.74		**-0.30***
Seasonal Allergies (Question 2c)	108	2.46	0.77		1077	2.40	0.74		-0.07
Asthma diagnosed by doctor (Question 9)	205	2.29	0.72	#	946	2.43	0.74		**-0.14***
One or more talking topics requested by parent (Questions 14-20)	290	2.29	0.72		895	2.44	0.74		**-0.15***
Two or more talking topics requested by parent (Questions 14-20)	94	2.25	0.65		1091	2.42	0.74		**-0.17***
Note: * significant at Pr (t) <=.05									

Table 5b 2003-2004 Group Differences as Measured by Fall COR Total Scores

2003-04 Health Problems and Child Outcomes t-Tests for Children with and without Health Problems Indicated in CHI Group Differences as Measured by Fall COR Total Scores									
	Students with Health Problem Indicated				Students without Health Problem Indicated				t-tests on Group Mean Differences
Health Problems Indicated in CHI by Parent	n	Mean	Std Dev		n	Mean	Std Dev		Differences in Means
High Lead Levels (Question 11h)	39	2.36	0.70		855	2.58	0.67		**-0.22***
Behavior Problems (Question 11a)	54	2.35	0.57		840	2.58	0.67		**-0.23***
Early Intervention Services (Question 11d)	52	2.36	0.70		842	2.58	0.66		**-0.22***
Ear Infections - 6 or more (Question 11c)	105	2.58	0.67		789	2.57	0.67		0.01
"Low iron" or iron deficiency (Question 11j)	43	2.61	0.63		851	2.57	0.67		0.04
Seasonal Allergies (Question 2c)	86	2.65	0.70		808	2.56	0.66		0.09
Asthma diagnosed by doctor (Question 9)	157	2.54	0.63		712	2.56	0.67		-0.02
One or more talking topics requested by parent (Questions 14-20)	228	2.34	0.64		666	2.65	0.66		**-0.31***
Two or more talking topics requested by parent (Questions 14-20)	84	2.22	0.70		810	2.60	0.70		**-0.38***
Note: * significant at Pr (t) <=.05									

2004-2005 Growth in COR Score Results

From the t-test results in Table 6a it can be seen that the parent's responses to certain questions on the CHI form are also sometimes related to the student's growth in the total COR score, as measured from fall 2004 to spring 2005. If the parent indicated that the child has had behavior problems, had early intervention services, or the parent specified the he/she would like to talk to someone about their child's problems for any of seven different problem areas; and responded to "one or more" of these problem areas, then significant negative differences were found for these students as opposed to the group that did not have these parent responses.

Table 6b, which is based on last year's data, is included for comparison purposes. The responses concerning the behavior problems showed consistent results for the last 2 years.

Table 6a 2004-2005 Group Differences as Measured by COR Growth

2004-05 Health Problems and Child Outcomes t-Tests for Children with and without Health Problems Indicated in CHI Group Differences as Measured by COR Growth							
	Students with Health Problem Indicated			Students without Health Problem Indicated			t-tests on Group Mean Differences
Health Problems Indicated in CHI by Parent	n	Mean	Std Dev	n	Mean	Std Dev	Differences in Means
High Lead Levels (Question 11h)	40	1.05	0.60	913	1.19	0.60	-0.14
Behavior Problems (Question 11a)	51	0.98	0.57	902	1.20	0.60	**-0.22***
Early Intervention Services (Question 11d)	51	0.98	0.55	902	1.20	0.60	**-0.22***
Ear Infections - 6 or more (Question 11c)	81	1.16	0.58	872	1.19	0.60	-0.03
"Low iron" or iron deficiency (Question 11j)	33	1.18	0.50	920	1.18	0.60	0.00
Seasonal Allergies (Question 2c)	92	1.14	0.66	861	1.19	0.59	-0.05
Asthma diagnosed by doctor (Question 9)	175	1.22	0.63	751	1.17	0.59	0.04
One or more talking topics requested by parent (Questions 14-20)	215	1.09	0.59	738	1.21	0.60	**-0.12***
Two or more talking topics requested by parent (Questions 14-20)	71	1.10	0.59	882	1.19	0.60	-0.09
Note: * significant at Pr (t) <=.05							

Table 6b 2003-2004 Group Differences as Measured by COR Growth

2003-04 Health Problems and Child Outcomes t-Tests for Children with and without Health Problems Indicated in CHI Group Differences as Measured by Fall COR Growth							
	Students with Health Problem Indicated			Students without Health Problem Indicated			t-tests on Group Mean Differences
Health Problems Indicated in CHI by Parent	n	Mean	Std Dev	n	Mean	Std Dev	Differences in Means
High Lead Levels (Question 11h)	32	1.07	0.70	699	1.01	0.59	0.06
Behavior Problems (Question 11a)	46	0.83	0.51	685	1.03	0.59	**-0.20***
Early Intervention Services (Question 11d)	43	0.90	0.55	688	1.02	0.59	-0.12
Ear Infections - 6 or more (Question 11c)	86	1.07	0.62	645	1.00	0.58	0.07
"Low iron" or iron deficiency (Question 11j)	36	0.97	0.66	695	1.02	0.58	-0.05
Seasonal Allergies (Question 2c)	70	0.99	0.59	661	1.02	0.58	-0.03
Asthma diagnosed by doctor (Question 9)	134	1.06	0.58	577	1.00	0.59	0.06
One or more talking topics requested by parent (Questions 14-20)	185	1.03	0.75	546	1.00	0.59	0.03
Two or more talking topics requested by parent (Questions 14-20)	72	1.21	0.65	659	0.99	0.57	**-0.22***
Note: * significant at Pr (t) <=.05							

2004-2005 T-CRS Score Results

From the t-test results in Table 7a it can be seen that the parent's responses to certain questions on the CHI form are also sometimes related to the presence of a T-CRS behavior control risk factor identified for the student. If the parent indicated that the child has had behavior problems or an ear infection problem, or if the parent specified that he/she would like to talk to someone about the child's problems for any of seven different problem areas and responded to "one or more" of these problem areas, then significant negative differences were found for these students as opposed to the group that did not have these parent responses.

Table 7b, which is based on last year's data, is included for comparison purposes. The responses concerning behavior problems and about asking parents if they would like to talk to someone about their child's problems for any of seven different problem areas showed consistent results for the last 2 years.

It is interesting to see that behavior control problems as noted by the teacher in the fall T-CRS measures are statistically related to behavior control problems as identified by the parent in the fall CHI form, for many of the students. This shows agreement of teacher and parent for externalizing behaviors.

Table 7a 2004-2005 Group Differences as Measured by Fall T-CRS Behavior Risk Factor Presence

2004-05 Health Problems and Child Outcomes t-Tests for Children with and without Health Problems Indicated in CHI Group Differences as Measured by Fall T-CRS Behavior Risk Factor Presence							
	Students with Health Problem Indicated			Students without Health Problem Indicated			t-tests on Group Mean Pct. Differences
Health Problems Indicated in CHI by Parent	n	Pct.**	Std Dev	n	Pct.**	Std Dev	Differences in Mean Pct.
High Lead Levels (Question 11h)	56	14%	35%	1138	10%	30%	+4%
Behavior Problems (Question 11a)	68	22%	42%	1126	10%	30%	**+12%***
Early Intervention Services (Question 11d)	60	13%	34%	1134	10%	30%	+3%
Ear Infections - 6 or more (Question 11c)	96	18%	38%	1098	10%	30%	**+8%***
"Low iron" or iron deficiency (Question 11j)	44	14%	35%	1150	10%	30%	+3%
Seasonal Allergies (Question 2c)	110	11%	31%	1084	10%	31%	+1%
Asthma diagnosed by doctor (Question 9)	211	11%	32%	948	10%	30%	+1%
One or more talking topics requested by parent (Questions 14-20)	301	16%	36%	893	9%	29%	**+7%***
Two or more talking topics requested by parent (Questions 14-20)	102	16%	37%	1092	10%	30%	+6%
Notes: * significant at Pr (t) <=.05 **Pct.** denotes percentage of students with t-crs risk factor present**							

Table 7b 2003-2004 Group Differences as Measured by Fall T-CRS Behavior Risk Factor Presence

2003-04 Health Problems and Child Outcomes t-Tests for Children with and without Health Problems Indicated in CHI Group Differences as Measured by Fall T-CRS Behavior Risk Factor Presence							
	Students with Health Problem Indicated			Students without Health Problem Indicated			t-tests on Group Mean Pct. Differences
Health Problems Indicated in CHI by Parent	n	Pct.**	Std Dev	n	Pct.**	Std Dev	Differences in Mean Pct.
High Lead Levels (Question 11h)	42	10%	30%	822	8%	27%	+2%
Behavior Problems (Question 11a)	52	21%	41%	812	7%	26%	**+14%***
Early Intervention Services (Question 11d)	44	18%	39%	820	8%	27%	**+10%***
Ear Infections - 6 or more (Question 11c)	102	7%	25%	762	8%	28%	-1%
"Low iron" or iron deficiency (Question 11j)	44	14%	35%	820	8%	27%	+6%
Seasonal Allergies (Question 2c)	85	5%	21%	779	9%	28%	-4%
Asthma diagnosed by doctor (Question 9)	160	4%	27%	680	6%	28%	-2%
One or more talking topics requested by parent (Questions 14-20)	215	12%	32%	649	7%	26%	**+5%***
Two or more talking topics requested by parent (Questions 14-20)	80	15%	36%	784	8%	26%	**+7%***
Notes: * significant at Pr (t) <=.05 **Pct.** denotes percentage of students with t-crs risk factor present**							

Parent Involvement and Child Outcomes (New Section)

Purpose

For the past several years, 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 study was to examine these key parent attendance indicators and to see if any relationships exist between parent involvement and the performance of the children. An analysis of attrition of prekindergarten children was also performed that compared the parent and student characteristics of those students who stayed in their classroom all year versus transitioned students.

Summary of Findings

It was found that by performing and replicating a cluster analysis on the parent attendance data, three distinct categories of parent involvement were detected which was consistent over the last 2 school years. These groupings for parents included: "Group Involvement," "Classroom Involvement," and "Low Involvement" types. For all RECAP programs combined, 59% of the parents were categorized by this cluster analysis as of the "Low Involvement" type. While 27% were "Group Involved" and 15% were "Classroom Involved."

There was a large variation among programs regarding the frequency of the 3 involvement types. One program at the high extreme had 82% of their parents categorized as "Low Involvement" while another program at the lower end of the range had 50%. We found that growth in the COR academic subscale scores could be related to the parent involvement type. The "Group Involvement" type of parents had children who grew 1.13 in the COR academic subscale compared to "Low Involvement" parents whose children grew 0.99. Differences in children's T-CRS scores for the different parent involvement types were not found. However, there were significant interactions of program by parent involvement. In other words, for parents in some specific programs, parent involvement type was indeed related to child performance in both COR and T-CRS scores.

A student attrition analysis was completed by comparing a group of students (and their parents) who stayed in their classroom all year with a group that transitioned out during the year. It was found that the two groups could not be distinguished by the parent involvement type alone. The parents of both groups had very similar involvement patterns. However, the students who stayed in the classroom all year had significantly higher fall COR and T-CRS scores when compared to the transitioned group. The group that stayed all year also had significantly higher student attendance rates.

1a. Attendance Data

Four different types of parent-program contacts were recorded:

1) Attendance at parent group meetings (percentage of actual number held)
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.

Because the four indicators are interrelated, it is misleading to look at them as if they were independent of one another. Therefore, a K-Means cluster analysis was performed and a 3-cluster solution was chosen based on stability of clusters (consistency between years), sufficient number of members for each cluster and interpretability.

Only the 6 RECAP programs that had 50 or more students enrolled per year were included in these analyses. Except for the persistency study at the end of this report, only those parents and students who had a complete set of fall and spring COR scores were included. Having a complete set of COR scores for a student was interpreted as a sign that the student was in the classroom all year (not transient). Also, 2003-2004 and 2004-2005 cohort data were combined when permissible, to insure a large enough sample size for the following analyses.

In running the K-Means procedure, we first converted all four indicators into Z-scores (A Z-score represents the position of an individual score in terms of standard deviations from the mean) and inspected for outliers. All 4 indicators had positive outliers, a few parents whose high level of involvement was atypical. Outliers above 2.5 standard deviations were removed from further analysis.

By running K-Means cluster analyses on 2003-2004 and 2004-2005 cohort data separately, it was discovered that there were some very consistent clusters found across both cohorts. That is, when analyzed separately, the data from the both cohorts resulted in the same three clusters. See figures 1 and 2 for the results from the two cohorts separately. See figure 3 for the cluster analysis results when the 2 cohorts were combined.

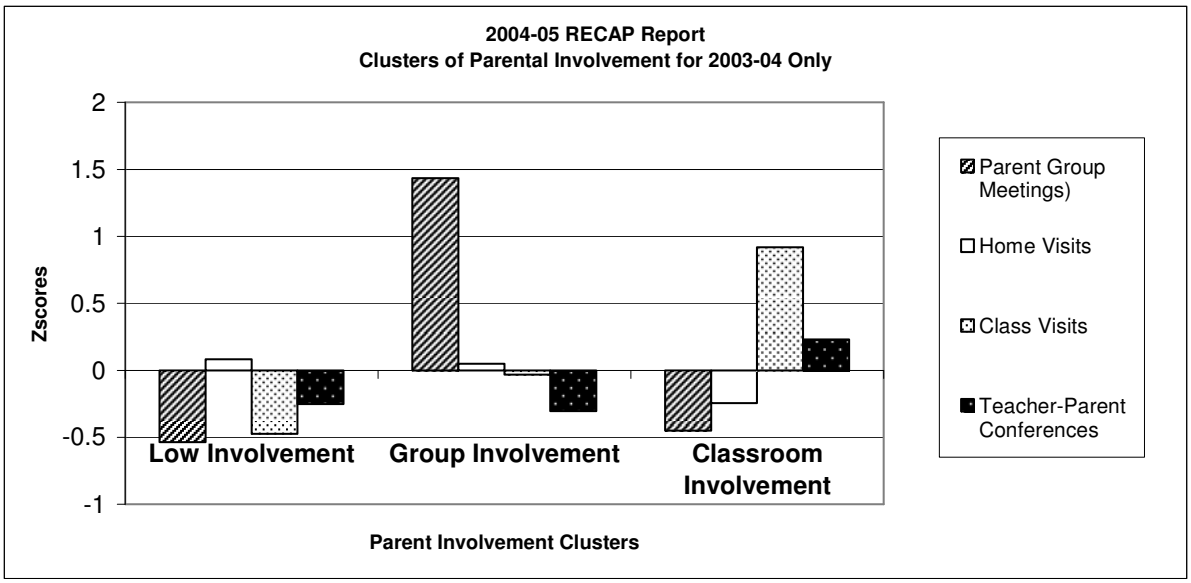


Figure 1 Types of involvement derived from the 2003-2004 cohort data

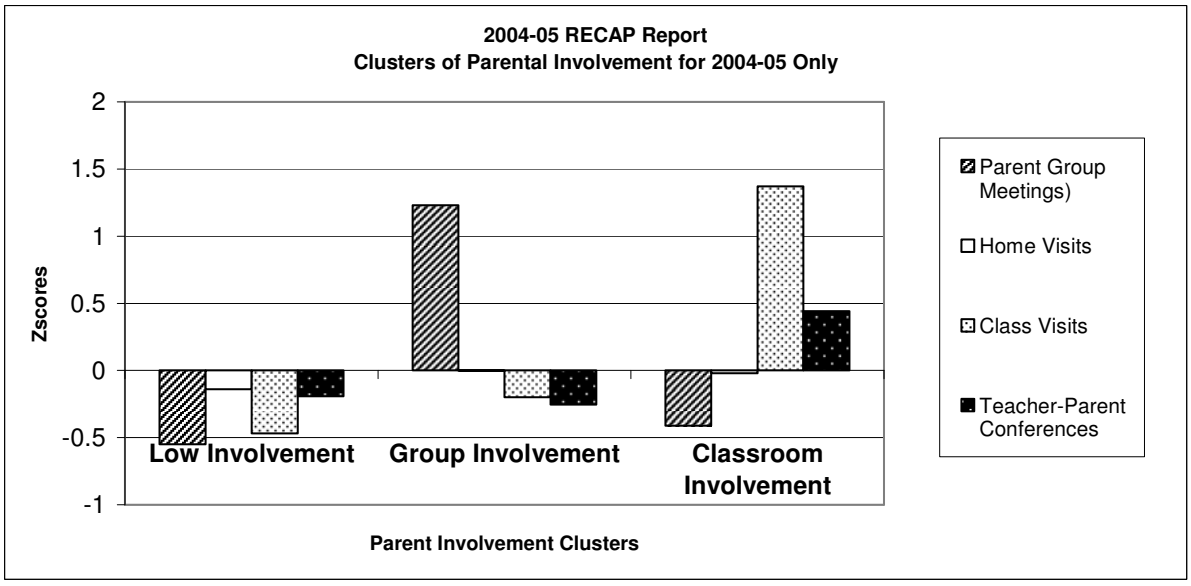


Figure 2 Types of involvement derived from the 2004-2005 cohort data

Figure 3 below shows the results of the K-Means cluster analysis when combining the 2003-2004 and 2004-2005 cohort data.

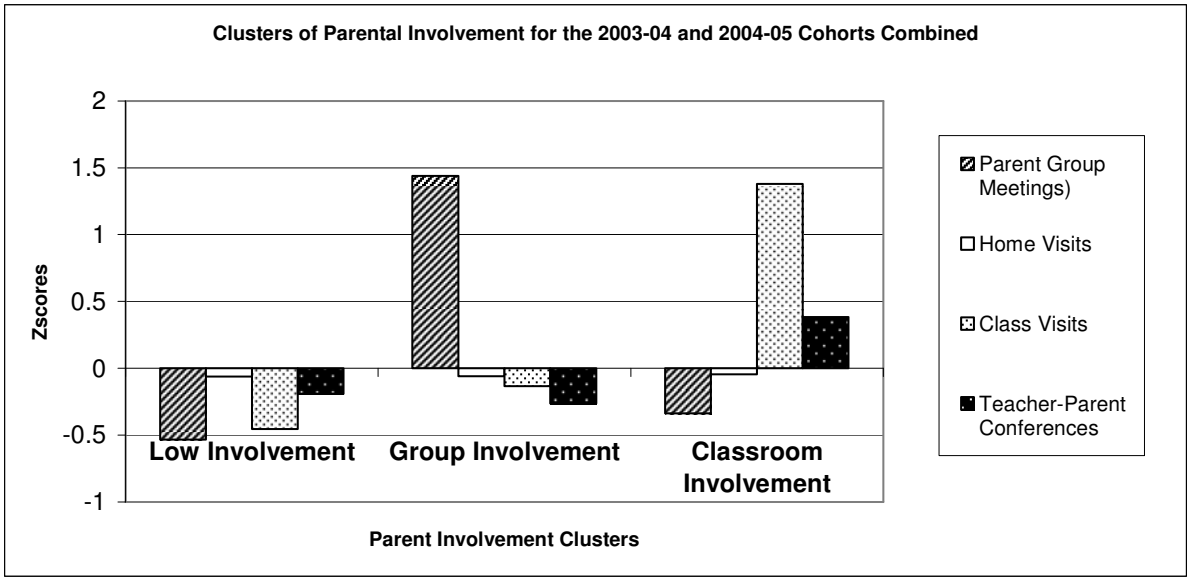


Figure 3 Types of involvement derived from the 2003-2004 and 2004-2005 cohorts combined

Figures 1 through 3 show the average Z-scores of the 4 indicators for each of the 3 clusters identified. The first cluster was labeled "Low Involvement" with the caveat that we simply have no data on how much or how little parents are involved in their children's education and experiences outside of the program. Therefore, the low involvement label is short for low involvement in the program. The second cluster was labeled "Group Involvement" because parents in that cluster had an extraordinary high level of attendance at parent group meetings compared to members in the other clusters. Members of the third cluster were much more likely to make classroom visits and participate in teacher-parent conferences. This group was labeled "Classroom Involvement."

Table 1 below shows how many parents belonged to each of the 3 involvement types when the 2003-2004 and 2004-2005 cohorts were combined.

Table 1 Parent Involvement Types by Program

Number of Parents Identified by Parent Involvement Type by Program 2003-2005							
	Parent Involvement Types from K-Means Cluster Analysis						
	Low Involvement		Group Involvement		Classroom Involvement		
program	#Parents	Pct.	#Parents	Pct.	#Parents	Pct.	Total
A	328	61.1%	207	38.5%	2	0.4%	537
B	81	49.7%	13	8.0%	69	42.3%	163
C	60	53.6%	27	24.1%	25	22.3%	112
E	116	67.8%	44	25.7%	11	6.4%	171
I	44	81.5%	8	14.8%	2	3.7%	54
J	246	53.9%	97	21.3%	113	24.8%	456
Total	875	58.6%	396	26.5%	222	14.9%	1493

In the pie chart in Figure 4 below, we can see when all programs are combined, 59% of all parents in the study fell into the "Low Involvement" parent involvement type. 27% were of the "Group Involvement" type and 15% were of the "Classroom Involvement" type.

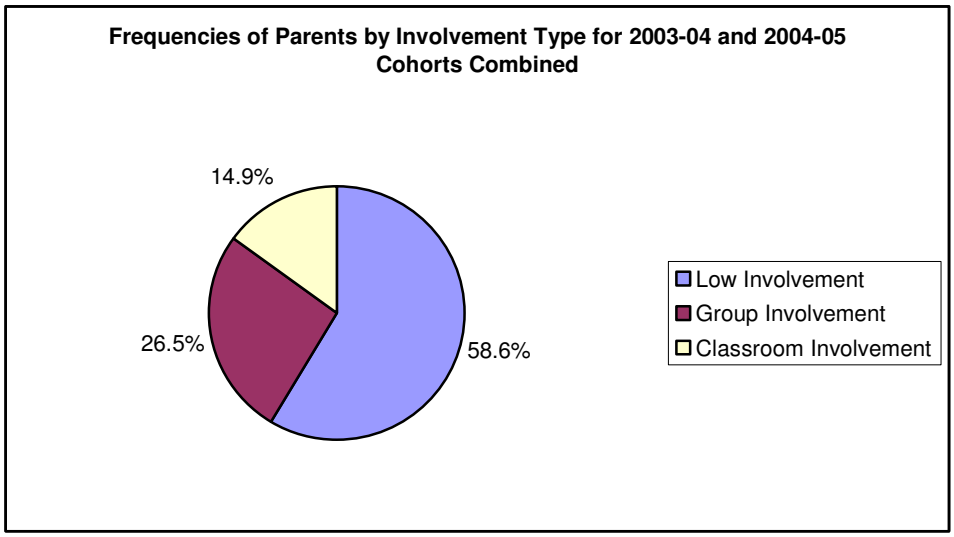
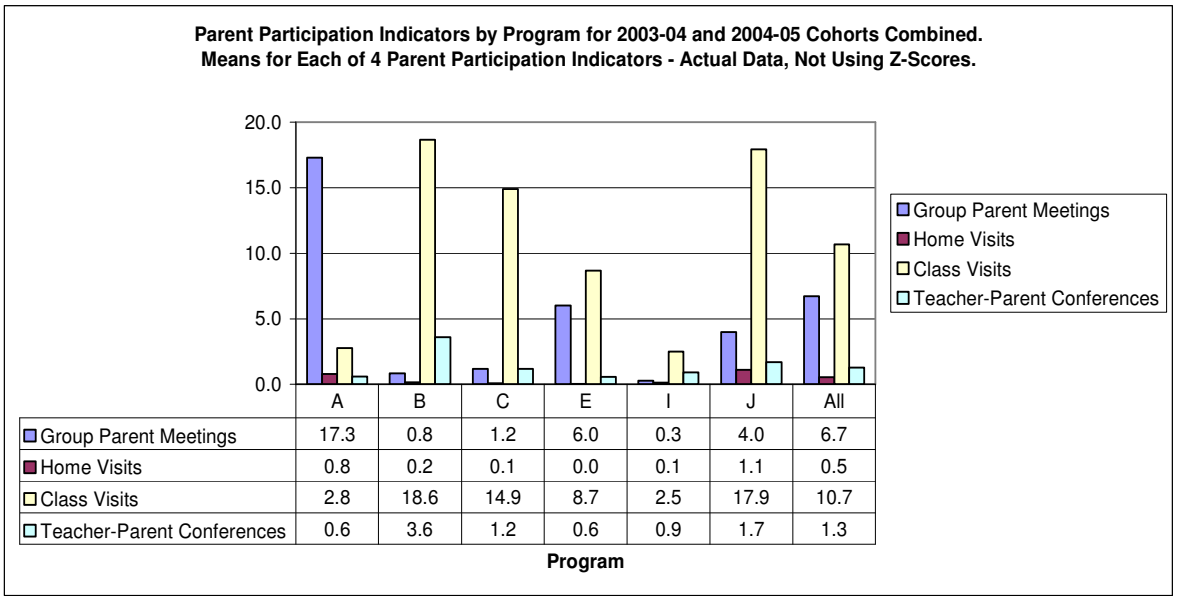


Figure 4 Frequencies of Parents by Involvement Type for 2003-2004 and 2004-2005 Cohorts Combined

Figure 5 below shows the mean values of the actual data used in these analyses. This graph shows the raw data, not z-scores. It shows the great amount of variation between programs in the four parent involvement indicators. Parents in program A attend many parent group meetings, while those in program B had many class visitations.



	A	B	C	E	I	J	All
Group Parent Meetings	17.3	0.8	1.2	6.0	0.3	4.0	6.7
Home Visits	0.8	0.2	0.1	0.0	0.1	1.1	0.5
Class Visits	2.8	18.6	14.9	8.7	2.5	17.9	10.7
Teacher-Parent Conferences	0.6	3.6	1.2	0.6	0.9	1.7	1.3

Figure 5 Parent Involvement Indicators by Program for 2003-2004 and 2004-2005 cohorts combined.

1b. Additional Attendance Indicators of Interest

An additional measure of parent involvement was extracted and examined in this study, "total parent contacts," i.e. the total number of group parent meetings, home visits, class visits, and teacher-parent conferences, or simply the sum of all contacts. Figure 6 below shows the mean total parent contacts displayed by program.

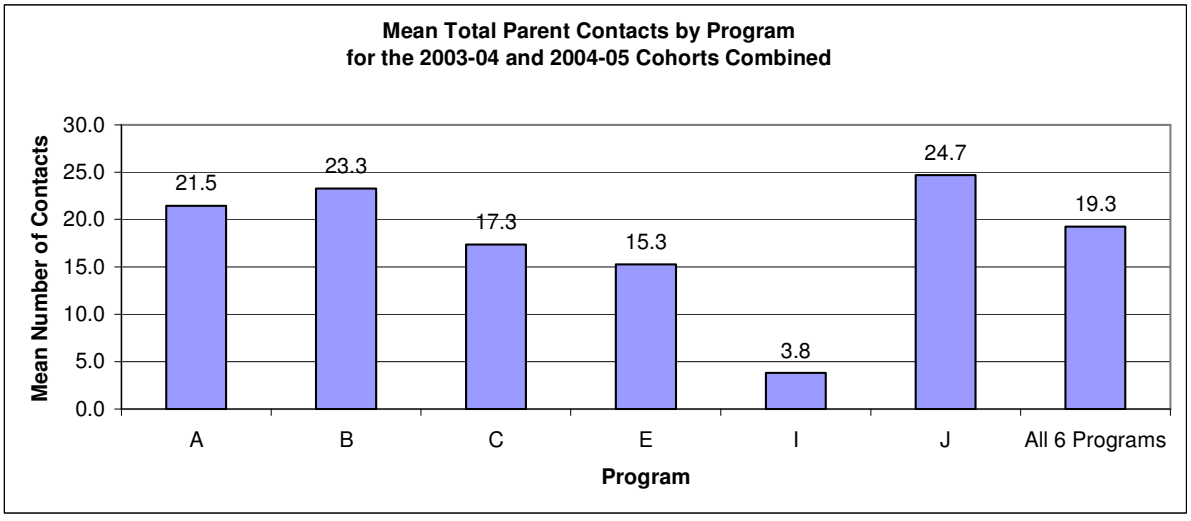


Figure 6 Mean Total Parent Contacts by Program for 2003-2004 and 2004-2005 Combined

In addition to calculating "total contacts," we were also able to calculate and compare student attendance rates by program. This variable was simply calculated as the number of sessions attended, by each child, divided by the possible sessions times 100. Figure 7 shows the child attendance by program. Please note that only students who had pre and post COR scores in the same classroom were included. Students who moved between classrooms during the year are not included in this data.

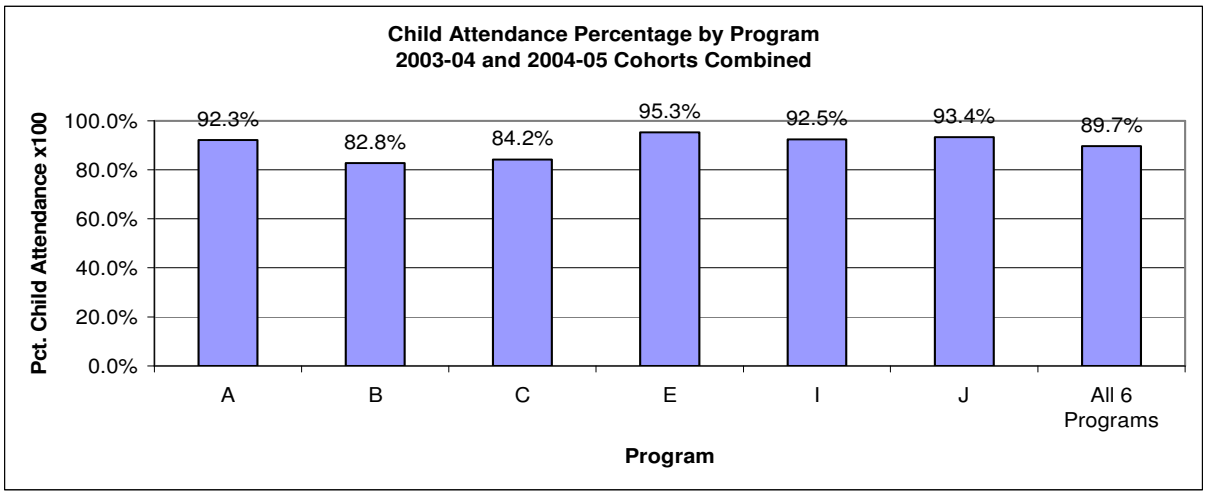


Figure 7 Child Attendance Percentages by Program for 2003-05.

2a. Multiple Analysis of Covariance (MANCOVA) Using COR Scores

The purpose of the following analyses was to detect any relationships between parent involvement types, programs, and children's outcomes as measured by the COR. Three separate MANCOVAs were performed with each student's fall, spring, and growth in COR scores (3 subscales for social, motor, and academic skills) as the dependent variables respectively. The main effect variables in the MANCOVA were each parent's involvement type (one of three types) and the program that the student was enrolled in (1 of 6 possible programs). Also, the 2-way interaction of parent involvement type and program was examined. The covariates used were gender, child's age, and 1 of 3 possible race/ethnicities: 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. The MANCOVA using COR Time 2 as dependent variables also used COR Time 1 variables as a covariate. The results of these 3 MANCOVAs are displayed in table 2 below.

2b. Parent Involvement Type and COR Outcomes

COR Time 1

The results of the parent involvement type main effect can be seen in Table 2 below. In Table 2 we can see that the overall main effect of the parent involvement type was not significant (Wilks' Lambda= .992, $F(6,2706)=1.9$, $p>.05$) for the Time 1 COR MANCOVA. COR scores for children at the beginning of the year were the same regardless of parent involvement type.

COR Time 2

In Table 2 we can see that the overall main effect of the parent involvement type was not significant (Wilks' Lambda= .992, $F(6,2700)=1.9$, $p>.05$) for the Time 2 COR MANCOVA. Children's COR scores at the end of the year were also very similar, but this analysis does not take growth into account.

COR Growth

However, the parent involvement type is related to the student's overall change in COR score. Overall, the main effect of parent involvement type was found to be significant (Wilks' Lambda= .990, $F(6,2706)=2.3$, $p<.05$). In Table 2 we can see that the parent involvement type was found to be significantly related the academic subscale ($F(2,1378)= 3.0$, $p<.05$). The group involvement type of parent resulted in significantly higher student growth in academic skills; growth in social and motor skills was not significant.

Looking at the contrasts in Table 2, the "group involvement" type of parent had children with significantly higher academic skills growth than "low involvement" types of parents. The mean growth in academics skills was even higher for the classroom involvement types, but the standard error was also much higher for the classroom type group, so the significance tests failed.

Table 2 Parent Involvement type main effect

Table 2								
COR Results by Parent Involvement Types								
Includes only students with both a fall and spring COR score								
	Parent Involvement Type							
	Low (L)		**Group (G)**		**Classroom (C)**			
Measure	**Mean**	**Std. Error**	**Mean**	**Std. Error**	**Mean**	**Std. Error**	**F***	**Contrast (Comparing Types)**
N	804		363		211			
COR Time 1 MANCOVA							1.9	
Social	2.80	.03	2.59	.06	2.61	.12	5.3	
Motor	2.76	.03	2.60	.06	2.69	.12	2.7	
Academic	2.28	.03	2.15	.05	2.22	.11	2.5	
COR Time 2 MANCOVA							1.9	
Social	3.73	.03	3.77	.05	3.79	.10	0.4	
Motor	3.73	.03	3.79	.06	3.62	.11	1.1	
Academic	3.24	.03	3.33	.06	3.40	.11	1.0	
COR Growth MANCOVA							**2.3***	
Social	0.97	.03	1.12	.06	1.13	.12	2.9	
Motor	1.01	.03	1.14	.06	0.92	.13	2.1	
Academic	0.99	.03	1.13	.06	1.16	.12	**3.0***	**G>L**
Note*: Effects significant at p<.05. General Rule: If the multivariate F is not significant, then the univariate F values are not significant.								

Figures 8 below shows the fall and spring academic COR scores for the 3 parent involvement types. In this graph, both the group and classroom involvement type of parents had children with a mean change from fall to spring of 1.18. The low involvement group, although starting off a little higher, had a mean growth of only 0.96, and ended up with the lowest academic COR scores in the spring.

Although the effect size is small (.25), it was found to be significant. The growth rates seen in Figure 8 are based on estimated marginal means from each MANCOVA performed on the Time 1 and Time 2 data.

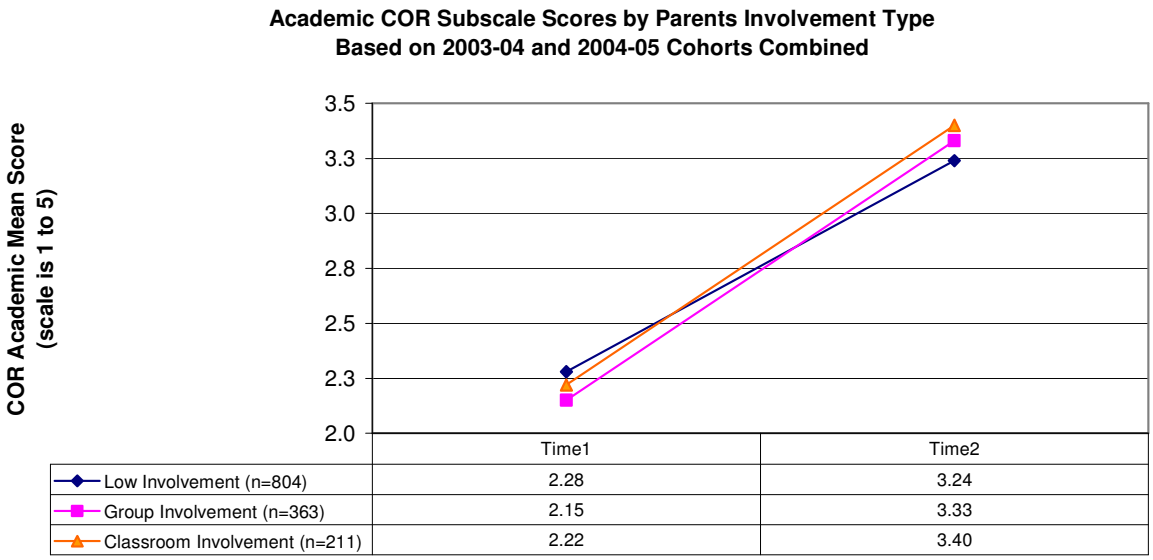


Figure 8 Parents Involvement Type and the COR Academic Subscale Scores

2c. Programs and COR Outcomes

Although the main focus of this report is parent involvement, it is interesting to discover the variability in child outcomes among programs. Tables 3a and 3b below show the mean COR scores by program which resulted from the MANCOVAs described above. The means displayed are the estimated marginal means by program. In other words, these are means that are adjusted for the covariates used in the MANCOVA, the involvement type main effect, and the parent involvement type by program interaction.

COR Time 1

In Table 3a we can see that the overall, multivariate main effect of the program was significant (Wilks' Lambda= .937, $F(15,3735)=6.0$, $p<.05$) for the Time 1 COR MANCOVA. Programs differed in their COR scores.

COR Time 2

Also in Table 3b we can see that the program effect was not significant (Wilks' Lambda= .977, $F(15,3727)=2.1$, $p>.05$) for the Time 2 COR MANCOVA. There were similar end of year COR score results among programs.

COR Growth

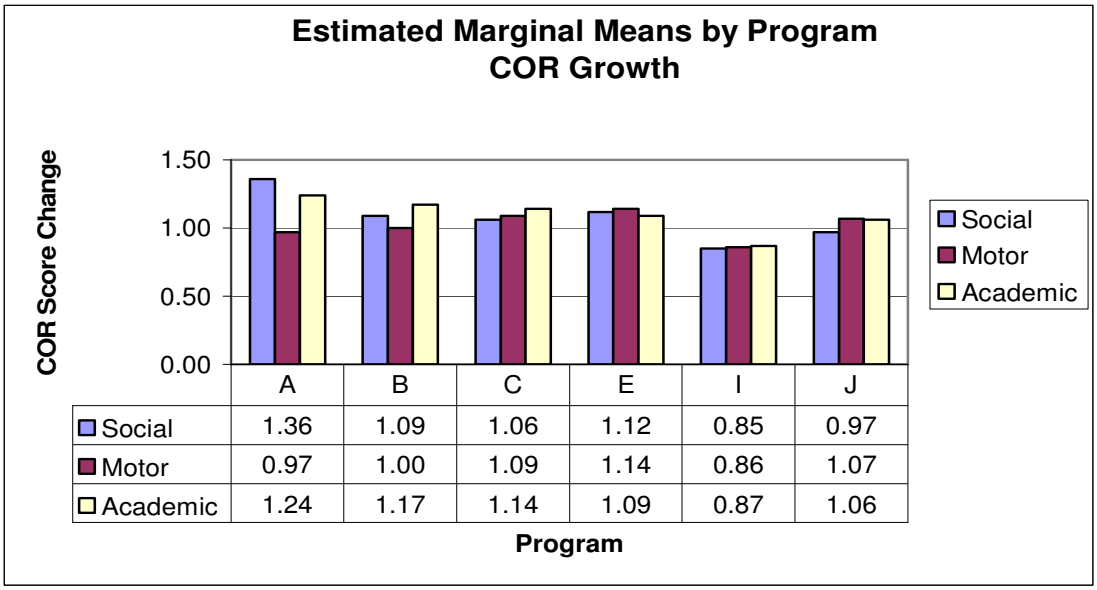
In addition, Table3c shows that the effect of the program on the change in COR was not significant (Wilks' Lambda= .980, $F(15,3735)=1.9$, $p>.05$. Growth for programs was also similar among programs, when considered by itself and not including parent involvement. Both program and parent involvement are considered together in the next section 2d.

Table 3a Program main effect COR Time 1

Table 3a							
Time 1 Program Main Effect on COR Scores at Time1							
Sample only includes those students with matching pre and post COR scores.							
		COR Social MANCOVA		COR Motor MANCOVA		COR Academic MANCOVA	
Program	N	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error
A	493	2.59	0.16	2.74	0.16	2.18	0.14
B	154	2.60	0.07	2.52	0.07	1.86	0.06
C	112	2.52	0.07	2.51	0.07	2.09	0.06
D	167	2.64	0.08	2.77	0.08	2.39	0.07
I	52	2.90	0.18	2.84	0.18	2.48	0.16
J	40	2.76	0.04	2.71	0.04	2.33	0.03
F Value		2.4*		2.7*		11.3*	
Contrasts - comparing programs		I, J > C		E, J > B,C		B < All I, J > C	
F Value Time 1 Overall		6.0*					
Note: * significant at p<.05							

Tables 3b and 3c showing the Time 2 and COR Growth can be found in Appendix G in the separate Statistical Supplement.

Figure 11 below graphically shows the variation in COR growth scores by program, after the other main effects and covariates have been controlled for. It looks like the students in program A had slightly greater changes in the COR scores. The graphs for Time 1 and Time 2 (Figures 9 and 10) have been included in Appendix G in the separate Statistical Supplement.



	A	B	C	E	I	J
Social	1.36	1.09	1.06	1.12	0.85	0.97
Motor	0.97	1.00	1.09	1.14	0.86	1.07
Academic	1.24	1.17	1.14	1.09	0.87	1.06

Figure 11 Marginal Means by Program COR Growth

2d. Children's COR results were different based on the Parent Involvement Type by Program Interaction.

Section 2d of this report can be found in Appendix G in the separate Statistical Supplement.

T-CRS Results

3a. Multiple Analysis of Covariance (MANCOVA) Using T-CRS Scores

The purpose of the following analyses was to detect any relationships between parent involvement types, programs, and children's outcomes as measured by the T-CRS. Just as for COR, three separate MANCOVAs were performed with each student's fall, spring, and growth in T-CRS scores as the dependent variables respectively. The main effect variables in the MANCOVA were each parent's parent involvement type (one of three types) and the program that the student was enrolled in (1 of 6 possible programs). The MANCOVA for T-CRS Time 2 used T-CRS Time 1 variables as covariates. The other covariates used were gender, child's age, and 1 of 3 possible race/ethnicities: 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. The results of these 3 MANCOVAs are displayed in Table 5 below.
This T-CRS analysis includes only those students with matching pre and post T-CRS scores and are a subset of the students used in the COR analysis.

3b. Parent Involvement Type and T-CRS Outcomes

T-CRS Time 1

The results of the parent involvement type main effect on T-CRS can be seen in Table 5 in the separate Statistical Supplement. The overall main effect of the parent involvement type was not found to be significant (Wilks' Lambda= .993, $F(8,2502)=1.15$, $p>.05$) for the Time 1 T-CRS MANCOVA.

T-CRS Time 2

Also in Table 5 we can see that the effect of the parent involvement type was not found to be significant (Wilks' Lambda= .992, $F(8,2494)=1.29$, $p>.05$) for the Time 2 T-CRS MANCOVA.

T-CRS Growth

The effect of the parent involvement type and the change in T-CRS was also not found to be significant (Wilks' Lambda= .993, $F(8,2502)=1.10$, $p>.05$.

Summary

There was no difference in behavioral functioning (T-CRS scores) among children with parents that differed among types of parent involvement at the beginning of the year, at the end of the year or when considering growth from the beginning to end of year.

3c. Programs and T-CRS Outcomes

T-CRS Time 1

The results of the program main effect on T-CRS can be seen in Tables 6a below. We can see that the overall main effect of the program was found to be significant (Wilks' Lambda= .929, F(20,4150)=4.7, p<.05) for the Time 1 T-CRS MANCOVA. Programs differed in their T-CRS results at the beginning of the year.

T-CRS Time 2

Also in Table 6b we can see that the effect of the program effect was also found to be significant (Wilks' Lambda= .961, F(20,4137)=2.5, p<.05) for the Time 2 T-CRS MANCOVA. Programs differed in their T-CRS results at the end of the year.

T-CRS Growth

In addition, in Table 6c, we can see that the effect of the program on the change in T-CRS was found to be significant (Wilks' Lambda= .959, F(20,4150)=2.6, p<.05. Programs differed in their changes in T-CRS results from beginning to end of year.

Table 6a Program main effect Time 1

Table 6a									
Time 1 - Program Main Effect on T-CRS Scores									
Sample only includes those students with matching pre and post T-CRS scores.									
		T-CRS Assertiveness MANCOVA		**T-CRS Peer Social MANCOVA**		**T-CRS Behavior Control MANCOVA**		**T-CRS Task Orientation MANCOVA**	
		Mean	**Std. Error**	**Mean**	**Std. Error**	**Mean**	**Std. Error**	**Mean**	**Std. Error**
A	445	21.3	2.2	27.7	2.1	26.2	2.4	23.3	2.2
B	130	27.7	0.8	28.9	0.7	27.7	0.8	25.8	0.8
C	110	28.8	0.7	29.2	0.7	29.7	0.7	29.6	0.7
E	152	28.7	0.8	27.9	0.8	27.5	0.9	28.0	0.8
I	47	29.6	1.8	30.7	1.7	26.7	1.9	27.6	0.4
J	393	29.8	0.4	31.2	0.4	28.2	1.8	28.8	0.4
F Value By Subscale		**3.9***		**4.6***		1.3		**4.3***	
Contrasts		**A < All J > B**		**J > B, C, E**				**C, J > A, B E > A**	
F Value Time 1 Overall = 4.7*									
Note: * significant at p<.05									

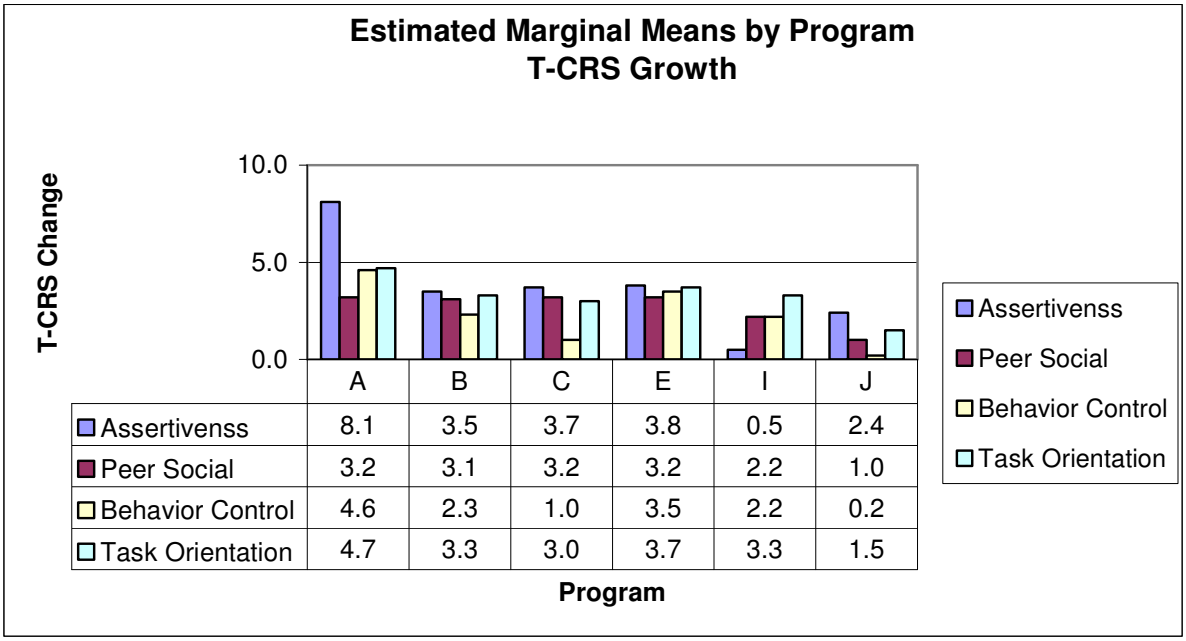
Table 6b Program main effect Time 2

Table 6b									
Time 2 - Program Main Effect on T-CRS Scores									
Sample only includes those students with matching pre and post T-CRS scores.									
		T-CRS Assertiveness MANCOVA		**T-CRS Peer Social MANCOVA**		**T-CRS Behavior Control MANCOVA**		**T-CRS Task Orientation MANCOVA**	
		Mean	**Std. Error**	**Mean**	**Std. Error**	**Mean**	**Std. Error**	**Mean**	**Std. Error**
A	445	33.2	1.7	32.0	1.7	31.3	1.8	30.7	1.8
B	130	31.6	0.6	32.4	0.6	30.2	0.7	30.2	0.6
C	110	32.2	0.5	32.4	0.5	29.5	0.6	31.4	0.6
E	152	32.3	0.6	32.0	0.6	31.4	0.7	31.6	0.7
I	47	29.3	1.3	32.6	1.4	29.7	1.5	31.1	1.5
J	393	31.3	0.3	31.4	0.3	28.2	0.3	29.6	0.3
F Value By Subscale		1.4		0.9		**4.9***		**2.4***	
Contrasts						**J < B, C, E E > C**		**J < C, E**	
F Value Time 2 Overall = 2.5*									
Note: * significant at p<.05									

Table 6c Program main effect T-CRS growth

Table 6c									
T-CRS Growth - Program Main Effect on T-CRS Scores									
Sample only includes those students with matching pre and post T-CRS scores.									
		T-CRS Assertiveness MANCOVA		**T-CRS Peer Social MANCOVA**		**T-CRS Behavior Control MANCOVA**		**T-CRS Task Orientation MANCOVA**	
		Mean	**Std. Error**	**Mean**	**Std. Error**	**Mean**	**Std. Error**	**Mean**	**Std. Error**
A	445	8.1	1.9	3.2	1.9	4.6	2.0	4.7	2.0
B	130	3.5	0.7	3.1	0.7	2.3	0.7	3.3	0.7
C	110	3.7	0.6	3.2	0.6	1.0	0.6	3.0	0.6
E	152	3.8	0.7	3.2	0.7	3.5	0.7	3.7	0.7
I	47	0.5	1.6	2.2	1.6	2.2	1.6	3.3	1.6
J	393	2.4	0.3	1.0	0.3	0.2	0.3	1.5	0.3
F Value By Subscale		**3.2***		**4.0***		**4.9***		**3.0***	
Contrasts		**A > All**		**J < B, C, E**		**J < A, B E > C**		**J < B, C, E**	
F Value T-CRS Growth Overall = 2.6*									
Note: * significant at p<.05									

Figure 15 below graphically shows the variation in T-CRS growth scores by program, after the other main effects and covariates have been controlled for. Program A has more growth than the other programs, especially in assertiveness skills. The graphs for Time 1 and Time 2 (Figures 13 and 14) have been included in Appendix G in the RECAP Statistical Supplement.



	A	B	C	E	I	J
Assertivenss	8.1	3.5	3.7	3.8	0.5	2.4
Peer Social	3.2	3.1	3.2	3.2	2.2	1.0
Behavior Control	4.6	2.3	1.0	3.5	2.2	0.2
Task Orientation	4.7	3.3	3.0	3.7	3.3	1.5

Figure 15 T-CRS Change by Program

3d. Parent Involvement Type by Program Interaction and T-CRS Outcomes

Section 3d can be found in Appendix G of the RECAP Statistical Supplement.

Prekindergarten Student Attrition

The following section of this report examines parent and child involvement data for students who had a fall COR score but no spring COR. These tests were conducted to see if those children who remained for the whole year were different than those who left early.

In Table 11 below we can see that children who stayed all year in their classroom had significantly higher fall COR and T-CRS scores.

In Table 11 we can also see that the children who stayed all year in their program had significantly higher student attendance rates compared with attendance rates of children before they left. The child attendance rate for the early drop out group was only 80% compared to 89% for the students who stayed all year. The parents of children who stayed all year in their program had a parent's group meetings attendance rate of 29% compared to 21% for the dropout group.

Table 11 Comparing parents and children where the child had COR scores in fall and spring compared to those only in the fall.

RECAP Student Attrition Study 2003-04 and 2004-05 Cohorts Combined								
Comparing Outcomes for students with both fall and spring COR scores compared to those with COR only in the fall								
	Student has COR1 but no COR2			Student has both COR1 and COR2				
COR & T-CRS Outcomes	N	Mean	Std. Deviation	N	Mean	Std. Deviation		
COR Time 1							t value	Diff. in Means
COR Social	723	2.5	0.8	2660	2.7	0.8	-6.31	**-0.2***
COR Motor	723	2.5	0.8	2659	2.7	0.8	-4.43	**-0.1***
COR Academic	723	2.0	0.7	2659	2.2	0.7	-6.02	**-0.2***
T-CRS Time 1								
T-CRS Assertiveness	646	27.1	7.0	2501	28.0	7.0	-2.97	**-0.9***
T-CRS Peer Social	646	28.7	6.9	2501	29.7	6.7	-3.57	**-1.1***
T-CRS Behavior Control	645	27.3	7.8	2500	27.6	7.4	-0.92	0.3
T-CRS Task Orientation	644	26.7	7.3	2504	27.5	7.0	-2.64	**-0.8***
Attendance Rates								
%Student Attendance Rate	559	79.5	0.2	2449	89.4	0.1	-14.2	**-9.9***
%Parent-Group Meeting Attendance Rate for Parent	356	20.8	0.2	1588	29.0	0.3	-4.96	**-8.2***
* Significant at <.05								

The parents of students who left their program early had a similar K-Means clustering configuration when compared to those students who stayed the year. Figure 16 below shows the results of a K-Means cluster analysis on this special group of parents. By comparing Figure 16 with Figure 3 which included only parents of children who stayed all year in their classroom, we can see that the two groups had very similar parent involvement typology.

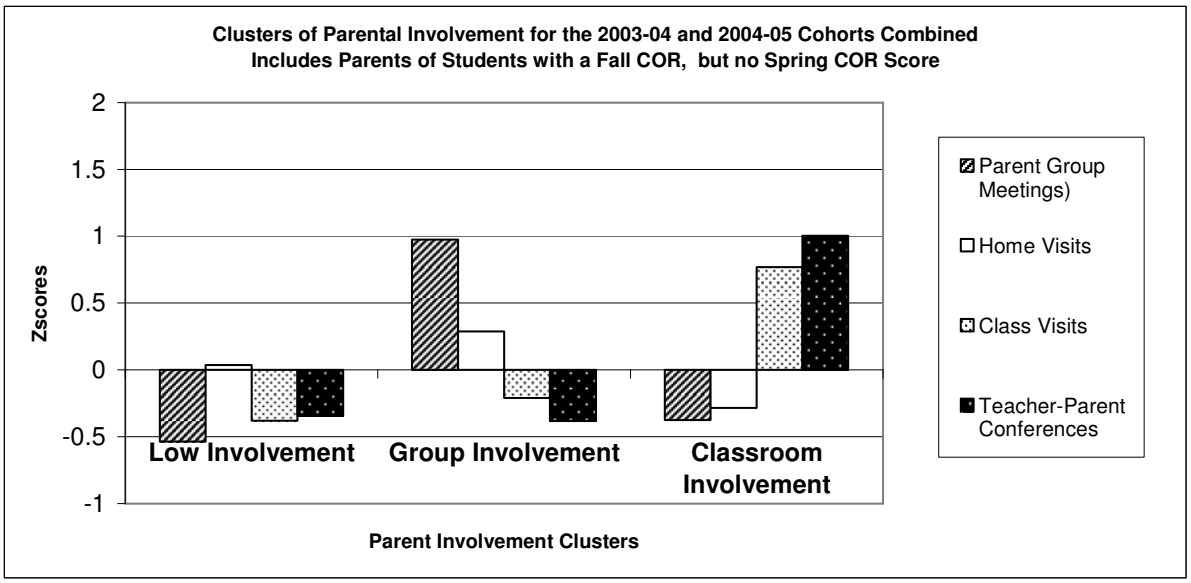


Figure 16 Clusters for parents of students who left their program early

In Table 12 below we have compared the involvement types of parents for students who stayed in their classroom all year and those who left early. The percentages of parents in each involvement type were very similar between the two groups.

Table 12 Number of parents by Involvement Type and Persistency Group

Frequencies of Involvement Type Parents by Persistency Group*				
	Parents of students who dropped out of their Classroom.		Parents of children who stayed all year in their classroom.	
Type	**N**	**Percentage**	**N**	**Percentage**
Low Involvement	186	60.0%	875	58.6%
Group Involvement	80	25.9%	396	26.5%
Classroom Involvement	44	14.2%	222	14.9%
Total	310		1,493	
Note: *The 2 groups displayed in this table were not found to be different based on a chi-square test (Pearson χ^2= 0.214, p>.05).				

Chi-square Test Comparing Groups

A cross tabulation and chi-square test of the parents of students who left their program early against those parents of children who stayed all year in their classroom was performed to determine if there was a difference in the relative frequencies for each of the 3 types of involvement**.** The two groups displayed in Table 12 above were not found to be different based on a chi-square test (Pearson χ^2= 0.214, p>.05).

Summary of Attrition Analysis

By comparing the parents and children who stayed all year in their classroom with those who dropped out, it was found that the two groups could not be distinguished by the parent involvement type alone. The parents of both groups had very similar involvement characteristics. However, the students who stayed in the classroom all year had significantly higher fall COR and T-CRS scores when compared to the group that left early. The group that stayed all year also had significantly higher student attendance rates.

A general caveat concerning this Parent Involvement and Child Outcomes report: from these attrition analyses we can not assume that any conclusions drawn from the children who stayed all year can be generalized to the children who left early.

Description of RECAP

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 and parent 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 past year, RECAP helped assess 2,790 children in 168 classrooms.

What early childhood provider programs participated in RECAP?

- Action for a Better Community, Inc. Head Start
- Charles Settlement House
- Diocese of Rochester Catholic Schools in the City of Rochester
- Early Childhood Education Quality Council Centers
- Family Resource Centers of Rochester
- Monroe Community College Childcare Center
- Rochester Children's Nursery Family Childcare Satellite Network
- 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

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 prepares packets of measures and distributes 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.

After training, teachers complete the Teacher-Child Rating Scale and Child Observation Record and parents complete the Parent Child Rating Scale, the Preschool Parent Support Questionnaire, and the Parent Questionnaire in fall and spring. The Early Childhood Parent Survey (parent satisfaction) is distributed to obtain parent feedback 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 class are produced 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 to identify strengths, needs, and to set goals for program, children, and families. Children's Institute staff supports 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 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. 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

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 with the interpretation of individual or group profile reports, as well as classroom quality profiles.

Introductory ECERS-R Training

Program staff and providers are introduced to the ECERS-R or FDCRS in a three-hour session. Participants learn observation and scoring techniques, and the benefits of using the ECERS-R in program assessment and quality improvement processes. Logistics of the classroom/program observation is also reviewed.

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 fifteen-hour program in the first year of involvement of a Master Observer. For observers beginning a second year of training, an additional four to five hours of training is required. In-depth training for 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, five new Master Observers were trained in the ECERS-R and seven new Master Observers were trained in FDCRS.

Training and Consultation Summary

- 10 program staff members participated in orientation activities.
- 31 prekindergarten teachers were trained in the COR.
- 48 program staff members were trained in the ECERS-R.
- 5 new ECERS-R master observers were trained.
- 19 ECERS-R master observers participated in additional training.
- 16 program staff members attended reports interpretation workshops.
- 15 program staff members and partners attended 2003-2004 Annual Report Findings Presentations.
- 6 new FDCRS master observers were trained.
- 33 family childcare providers participated in Introductory FDCRS Training.

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:

- Observer contacts the classroom teacher/provider to schedule the observation date
- Classroom observation occurs (3 to 4 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; 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, she/he requests a collaborative review process (outlined below)

Collaborative Review Process

As part of the classroom observation process using the ECERS-R or FDCRS, RECAP provides a review process if any teacher/provider believes that the ECERS-R/FDCRS score is not representative of the program. In the collaborative review, teachers and providers are welcome and encouraged to address questions they have about any of the quality indicators.

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 she/he feels a score does not an accurately represent the program.
2) If a teacher/provider questions any item(s) and wishes to formally address this, she/he contacts the project coordinator to obtain a Collaborative Review Request Form within which, she/he outlines 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 is 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 she/he 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.

Table 8
Summary of Collaborative Review Requests (ECERS-R only)

Summary of Results	2002	2003	2004	2005
Number of reviews	24 out of 117	18 out of 130	23 out of 137	16 out of 128
Percent	21%	14%	17%	13%
Total number of items reviewed	140	71	152	129
Total number of items changed	76	28	69	60
Average change in overall score	.23	.07	.18	.23
Range of changes in overall score	0 - .5	0 - .38	0 - .9	0 - .8

Table 8a Summary of Collaborative Review Requests (FDCRS only)	
Summary of Results	**2005**
Number of reviews	4 out of 54
Percent	.07
Total number of items reviewed	30
Total number of items changed	5
Average change in overall score	.05
Range of changes in overall score	0 - .2

Statistical History of RECAP

Figures 20 and 21 display the number of children and classes that RECAP has assessed and supported over the last five years.

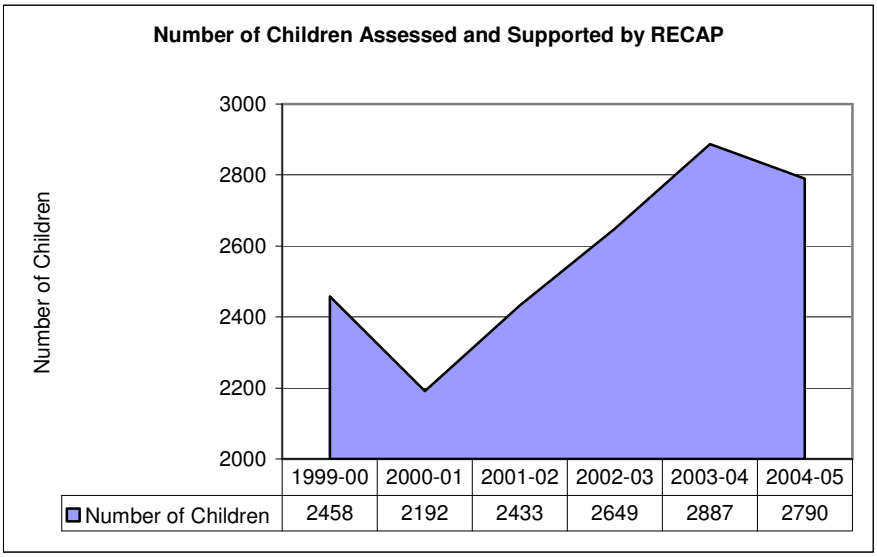


Figure 20 Six year history of the number of children assessed and supported by RECAP

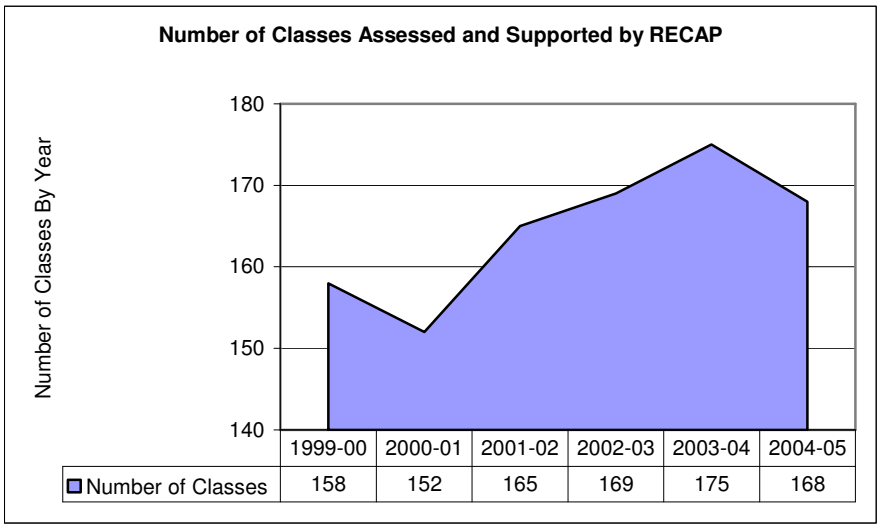


Figure 21 Six year history of the number of classes assessed and supported by RECAP

Table 9 below shows the age breakdown of RECAP students. Age is calculated as of December 1, 2004. Because the age of some students was not reported (84 students in 2004-2005), Table 9 includes a projected frequency based on a pro-rating of those students with missing age based on the percentages calculated from students who had their age reported.

Table 9 Age Breakdown for Children in RECAP Classes by Year

Age Breakdown for Children in RECAP Classes (Ages computed as of December 1st for each school-year)									
	2002-03			2003-04			2004-05		
age	actual frequency	actual pct.	projected frequency*	actual frequency	actual pct.	projected frequency*	actual frequency	actual pct.	projected frequency*
2	7	0.3%	7	22	0.8%	23	19	0.7%	20
3	507	19.8%	524	743	26.8%	774	650	24.0%	670
4	2004	78.2%	2072	1994	72.0%	2078	2023	74.8%	2086
5	42	1.6%	43	11	0.4%	11	13	0.5%	13
6	3	0.1%	3	0	0.0%	0	1	0.0%	1
	2563	100.0%	2650	2770	100.0%	2887	2706	100.0%	2790
missing	87	3.3%		117	4.1%		84	3.0%	
total	2650			2887			2790	100.0%	

Note: * signifies that projected frequency is based on pro-rating frequencies for missing age data

Presentations and Publications

(2004-2005)

Rochester Early Childhood Assessment Partnership

Hightower, A. D. & Montes, G. (2004, March). Trends in early special education. Invited Address: Special Education Training and Resource Center, Fairport, NY.

Hightower, A.D, Hightower, L.E. & Brugger, L.S (2004, April). RECAP: A program assessment and improvement model. New York State Association for the Education of Young Children Annual Conference. New York, NY.

Hightower, A.D., Cady, J., Ellwood, D., (June 2004). RECAP: A program assessment and improvement model. South Bend Area Community Foundation, South Bend, IN.

Hightower, A.D., Cady, J., Dumka, M., & MacGowan, A., (June 2004). RECAP: A program assessment and improvement model. Rochester City School District Board of Education, Quality Assurance Subcommittee, Rochester, NY.

Winter, M. A., Davies, P. T., Hightower, A. D., & Meyer, S. C. (in press). Relations among Family Discord, Caregiver Communication, and Children's Family Representations. Journal of Family Psychology.

Van Wagner, G. "Learning Environments: Past and Present," NYSAEYC Reporter (newsletter of NYS Association for the Education of Young Children), Volume XXVIII, Number 2, Fall 2004, pp. 6-7.

Statistical Supplement

A separate RECAP report has been prepared this year 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 topics that were introduced in the main RECAP report.

The title of the supplement is:

"Rochester Early Childhood Assessment Partnership 2004-2005 Eighth Annual Report, Statistical Supplement"

The report number is T05-003 and can be accessed on the Children's Institute Web Site on: www.childrensinstitute.net.

The Statistical Supplement includes:

Appendix A	Early Childhood Environment Rating Scale - Revised (ECERS-R)
Appendix B	Early Childhood Parent Survey (ECPS/Satisfaction)
Appendix C	Universal Prekindergarten (UPK) ECERS-R
Appendix D	Universal Prekindergarten (UPK) ECPS/Satisfaction
Appendix E	Children's Health Information (CHI 2.0) Additional Results
Appendix F	Pre-K Children with Disabilities Additional Results
Appendix G	Parent Involvement and Child Outcomes Additional Results
Appendix H	Reliability Statistics for RECAP Measures
Appendix I	ECERS-R Score Changes Over 1-Year Intervals
Appendix J	ECERS-R Scores Related to RECAP Teaching Experience
Appendix K	Factor Analysis on the Parent Questionnaire Results