# ROCHESTER EARLY CHILDHOOD ASSESSMENT PARTNERSHIP 2001-2002 ANNUAL REPORT

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Part 1

Executive Summary of RECAP Final Report 2001-2002

RECAP Final Report 2001-2002

# **EXECUTIVE SUMMARY – RECAP FINAL REPORT 2001-02**

The Rochester Early Childhood Assessment Partnership (RECAP) started in Rochester, New York in 1992 to address the growing need for understanding 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 New York State's Universal Pre-kindergarten program.

RECAP provides an integrated and systemic process for ensuring that early childhood programs have the information they need for making informed decisions that improve program practices and outcomes. RECAP provides useful data analysis 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 observations of adult and child interaction and environment; and 3) child-specific information on motor development, speech and language development, school skills, and socio-emotional adjustment.

The following service providers participated in RECAP last year:

- § ABC Head Start
- § City of Rochester Catholic Parochial Schools
- § Early Childhood Education Quality Council Centers
- § Family Resource Centers of Rochester
- § Florence S. Brown Pre-School Program
- § Rochester City School District Early Childhood and Elementary Schools
- § Rochester Preschool- Parent Program

# <u>Sample:</u>

• 1962 students and 117 classrooms were assessed this year.

#### <u>Measures:</u>

#### Quality of Classroom Environment.

Independent, well-trained observers rated quality of classroom environment using the Early Childhood Environment Rating Scale (ECERS). Seven areas of classroom quality were measured. The item scale ranges from 1 to 7. A score of 1 is considered "inadequate," and a 7 indicates "excellent" quality.

#### Socio-emotional risk factors.

The *Teacher-Child Rating Scale* (T-CRS) assessed four aspects of a child's socio-emotional adjustment: 1) Task Orientation, 2) Behavior Control, 3) Assertiveness, and 4) Peer Social Skills. Students who scored below the 15% iles (approximately 1 standard deviation) in any T-CRS subscale were considered to be at risk in that particular area.

#### Student Performance.

The Child Observation Record (COR), developed by High/Scope, assesses students ages 2.5 to 6 years of age. 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.

Student performance is measured by the change score of the COR between time 2 and time 1 in the three areas: academic, motor and social.

#### Reliability of the Measures.

The core measures of the study (ECERS, T-CRS and COR) had excellent alpha-reliabilities ranging from 0.88 to 0.94.

To ensure the inter-rater reliability of the ECERS observation, 31 classrooms were observed by two observers so that the level of agreement between different observers could be calculated. The inter-rater reliability was r=0.97

### Results on Classroom Quality.

- Classrooms assessed by the Rochester Early Childhood Assessment Partnership were of high quality, the average score was 6.1, the median score after removing outliers was 6.4. The average quality of Classrooms in RECAP is 1.82 standard deviations above the national average.
  - o 11% of the classrooms were rated below a 5
  - 69% of the classrooms have scores of 6 or above.
- Classroom quality has been steadily growing for the last three years.

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

- More than 80% of the students had change scores above developmental expectations. This year the percentage of students with "negative growth" was less than in previous years.
- In social and motor skills, minorities were more likely to have positive outcomes than white students. The differences were statistically significant. There were no detectable differences in academic skills.
- In academic and motor skills, there were no detectable differences by gender. Males were less likely to grow above expectations in social skills than females. The difference was statistically significant.

• There were no significant correlations between quality of the classroom environment and student performance as measured by the average growth in COR scores in the academic (n=93, r=0.04, p>.05), motor skill (n=93, r=0.14,p>.05), or social skills areas (n=93, r=0.17, p>.05).

# **Results Regarding Socio-Emotional Risk Factors**

- 12.8% of the students present multiple socio-emotional risk factors at entrance into preschool (time 1).
- Students who enter the preschool with multiple socio-emotional risk factors are rated by their pre-k teachers lower in academic, motor and social skills than their peers who are not at risk.
- 11% of the students, who initially present no socio-emotional risk factors, presented one (8%) or multiple (3%) risk factors at the end of the academic year.
- Initial classification of students with a single risk factor is not very stable. By the end of the academic year, 57% of the students classified with a single risk factor had no detectable socio-emotional risk factors, while 16% presented multiple socio-emotional risk factors.
- 55% of students who initially presented with multiple socio-emotional risk factors remained in that category at the end of the academic year. 16% of students with multiple risk factors initially, were classified as having a single risk at time 2, and 29% had no risks by time 2 assessment.
- Minority students and boys were more likely to be at-risk socio-emotionally than their peers.
- There were no detectable associations between quality of the classroom environment and a decrease in the number of socio-emotional risk factors or the prevention of additional risks during the academic year.

# **Evaluation of Three Interventions.**

Three interventions were assessed for the first time within RECAP this year.

- Wolf Trap (n=14 classrooms): Implemented through Aesthetic Education Institute, Wolf Trap hires local practicing artists to plan and work with classroom teachers for a series of 14 classroom sessions. The focus of the three planning sessions is based on teacher-selected topics and themes, through which Wolf Trap activities are implemented. During the classroom sessions, the artists model age appropriate strategies to engage students in experiential learning activities through the arts.
- Science Linkages (n=8 classrooms): Using hands-on science activities as a focus, Science Linkages provides in-classroom technical support and in-service opportunities for prekindergarten teachers. Trainers model strategies, based on multiple intelligences, for teaching well-integrated science, seizing upon the natural curiosity of prekindergarten

students. They assist the teacher in setting up science explorations for students to use independently.

- **Building Blocks Music (n=28 classrooms)**: Using a curriculum based on the Music Educators National Conference (MENC) standards for music, specialists work with the prekindergarten teacher to use music as a focus and vehicle for learning. The specialists model strategies to integrate the music curriculum with literacy, mathematics and other aspects of the curriculum. Materials and musical instruments are purchased for music centers, which are set up in each classroom for students to use independently.
- Experimental classrooms were compared against 43 classrooms which did not participate in any of the three interventions.
- There was no evidence that participation in any of these interventions was associated with higher quality of the classroom environment, or with student performance as measured by growth scores in academic, social or motor skill areas.

# **Results on Parental Satisfaction.**

- 59% of parents rated their child's program with an A grade, 20% rated their child's program with an A-, and 14% gave their child's program a B+.
- Compared with parental satisfaction results in 2000-01, parents were slightly less satisfied overall, and with the learning environment and with teachers in particular. Parents were more satisfied this year than last year with how programs address parent needs, child needs, administration and the building, room and equipment. These differences were small, and non-significant.

# Training & Consultation.

- 35 program staff participated in orientation activities.
- 48 pre-k teachers were trained in the COR.
- 43 teachers, assistant teachers and parent support staff were trained in the ECERS.
- 20 Head Start Education Managers and Administrators from the Philadelphia collaboration were trained in the ECERS.
- 8 new master observers were trained in ECERS.
- 24 experienced observers participated in additional ECERS training for master observers.

# RECAP ANNUAL REPORT 2001-02

### **ACKNOWLEDGEMENTS**

This report would not be possible without the important contributions of 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).

Major financial support was provided by: Rochester Area Community Foundation, County of Monroe Department of Social Services, Rochester City School District, Daisy Marquis Jones Foundation, Rochester's Child Fund of the Rochester Area Community Foundation, and the New York State Department of Education.

Other contributing partners include: ABC Head Start, 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, 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 individual 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 ongoing 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 parents who gave time from their busy schedules to share their thoughts and perceptions on a variety of topics.

We thank the entire RECAP team and the creative staff of Children's Institute, particularly Rusti Berent, Julia Guttman, Mary Temple, and Marcia Winter, for contributions to this report.

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

# INTRODUCTION

### What early childhood provider programs participated in RECAP?

- § ABC Head Start
- § City of Rochester Catholic Parochial Schools
- § Early Childhood Education Quality Council Centers
- § Family Resource Centers of Rochester
- § Florence S. Brown Pre-School Program
- § Rochester City School District Early Childhood and Elementary Schools
- § Rochester Preschool-Parent Program

# QUALITY OF THE CLASSROOM ENVIRONMENT

Classroom quality is key to the provision of early education services. Independent, well-trained observers rated quality of classroom environment using the Early Childhood Environment Rating Scale (ECERS). The ECERS was developed at the University of North Carolina in the 1970's, and revised in 1998. It is the most widely used observational tool allowing for an objective assessment of classroom quality and environment. The seven areas of classroom quality measured by the ECERS include:

- § 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 is considered meeting "minimal" standards", a 5 is equivalent to meeting "good" quality standards", and a 7 indicates "excellent" quality. Classrooms meeting National Association of the Education of Young Children (NAEYC) standards often score near 5.

After an observer was trained and met inter-rater reliability of .80 with a master observer, he/she was assigned to four to six classrooms. During a typical observation, an observer spent about 3 to 5 hours observing the classroom, focusing on 43 distinct items that make up the ECERS. After the classroom observation, the observer spent 30 to 60 minutes interviewing the teacher to answer any questions about classroom activities or features that could not be observed during the observation phase.

#### How are master observers trained?

In the first year of training, observers must attend a fifteen-hour training program. For observers beginning a second 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, skills in program observation, and self-interest.

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

Alpha reliability, a measure of internal consistency, for the measure was computed. Items 11, 27 and 37 were dropped because of insufficient data. The alpha reliability was 0.94.

As part of an on-going effort to guarantee the validity of the ECERS, 31 classrooms were observed by two observers so that the level of agreement between different observers could be calculated.

The inter-rater reliability was r=0.97 (n=31 dual observations). Using (a/a+d; a=agreement and d=disagreement) the median inter-rater reliability was .87 for exact matches and .94 for disagreement of one point or less. These findings show that the administration of the ECERS by RECAP conforms to national standards and is high quality, because the developers of the ECERS reported similar internal consistency (0.92) and inter-rater reliability (0.90).

#### Where is the ECERS being used?

The ECERS is used in many studies investigating the quality and outcomes of prekindergarten education both in the United States and internationally. The ECERS was adopted to measure the quality of pre-kindergarten classrooms funded by universal pre-kindergarten in the State of Georgia, the only other state besides New York that currently funds universal prekindergarten services. 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. In short, the ECERS is one of the premiere measures used to evaluate quality of prekindergarten environments around the world.

#### How does Rochester's formal ECE compare with ECE systems across the US?

One advantage of using the ECERS resides in comparing the quality of the pre-kindergarten programs in Rochester with other states and nations. Before any comparison is made, however, one needs to make sure that one is comparing "apples to apples" both in terms of the classrooms evaluated and the student population.

In most of the studies using the ECERS, a sample was taken that included urban, suburban, and rural prekindergarten and childcare centers. In these studies, there was no attempt to select only programs or centers serving a high need or low-income population. RECAP differs in that we measure the quality of centers and schools serving an urban population in a city recognized for its high level of per capita child poverty.

Figure 1 shows the average ECERS score for RECAP and other studies.

Figure 1. Quality of Rochester Formal ECE System



**Quality of RECAP Classrooms** 

RECAP is substantially higher in terms of quality. The reported standard deviation for the United States sample was 1.00, which would place RECAP classrooms about 1.82 standard deviations above the national average. Therefore, Rochester is fortunate to have an exceptionally high quality early childhood system for four-year-olds. Policy makers 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?

Yes. Figure 2 shows the overall growth in the last three years. For the past three years, stringent inter-rater reliability standards were set and met.





**ECERS Total Scores** 

Figure 3 shows the average scores by area and by year.





**RECAP Annual Report (1999-2002)** 

**ECERS** Overall Averages

The area with highest growth was parents and staff, followed by program structure. There was no improvement in activities or interaction. There was a decrease in personal care routines. Some of the small fluctuations most likely reflect random error.

Year: 1=1999-2000 2=2000-2001 3=2001-2002

#### Are individual programs improving?

Generally yes, or, at least, maintaining high quality.







Figure 4 shows that many individual programs also improved their overall ECERS quality over the last four years. It also shows that a number of programs were able to sustain high quality for four consecutive years. The majority of programs had average quality at or above 5 for the last two years.

In addition, several programs have shown steady progress in their averages. Other programs have fluctuated more. Again, small yearly fluctuations are most likely measurement error.

Key = ECERS Years 1 2 3 4 Program G left RECAP in 2000-2001

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





RECAP Annual Report (2001-2002) ECERS-Total

Program (n= Total Classrooms Observed)

Program G left RECAP in 2000-2001

The Numbers INSIDE the Graph are the Average ECERS Scores for Each Program The X is the Score for Each Classroom ==> \*\*Some Xs represent Several Classrooms with Identical Scores--see Table

Figure 5 shows the quality of each classroom in RECAP by program. There are a number of facts worthy of note:

- 1) 11% of the classrooms, 4% lower than last year, are below a score of 5, a very small number.
- 2) 69% of the classrooms have scores of 6 or above, indicating very high quality environments.

- 3) Most programs have very few classrooms below a 5.
- 4) The majority of students attending classrooms assessed within RECAP were immersed in "good" to "excellent" quality classroom environments.

Combining the information of the last two figures allows us to make a number of conclusions:

- 1) Some programs have a large number of classrooms and excellent quality for over three years. In particular, program A has 23 classrooms and has an impressive average of 6.6 with a high level of uniform quality. More importantly, that average uniform level of quality has been maintained for four years.
- 2) Smaller programs also have maintained excellent quality for the last three years.

What these results exemplify is that both large and smaller programs can and do provide and maintain good quality environments for their students. One size does not fit all.

Appendix A shows the distribution of ECERS scores by program for each of the areas of the ECERS. Because the results are similar to those presented immediately above, the interested reader is referred to that appendix.

# 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 students ages 2.5 to 6 years of age. Trained teachers systematically record their observations of children's functioning for 21 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)

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 we trained 48 teachers and teacher's assistants on the COR.

The COR has three subscales, (Fantuzzo et al, 2002) rather than one holistic score or the total for each of the categories listed by High/Scope (e.g. language and literature, etc.). The three subscales are:

Empirical Scales	Item Examples
1. Cognitive or Academic Skills	"beginning reading"
2. Coordinated Movement	"following music and movement directions"
3. Social Engagement	"relating to other children"

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

- 0.93 (n=1949) COR social
- 0.91 (n=1926) COR academic
- 0.88 (n=1926) COR motor

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

	Time 1			Change Score		
Skill Area	Ν	М	SD	N	М	SD
Academic	1986	2.25	0.75	1493	0.97	0.67
Motor	1987	2.80	0.82	1493	0.97	0.74
Social	1987	2.78	0.84	1493	0.94	0.69

Table 1. Time 1 COR and COR change scores means and standard deviations

#### Figure 6. Average Entrance COR Scores and Average Change Scores



Average Entrance & Change COR Scores

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. On average, students grew in the 0.9-1.0 range in all three areas. Overall, students were rated as having a slightly lower level of competence at entrance into prekindergarten and a slightly higher rate of growth than last year.

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

Unfortunately, HighScope for the Child Observation Record does not report the average increase for either the total score or the subscales due to aging. The average duration between time 1 and time 2 data collection was 7 months, from October to May, and so we would expect that a portion of the 0.9-1.0 growth is simply the result of 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. The average value calculated this year was XXX. This estimated value over the past three years was XX, XY, and XZ.

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 criterion. Expectations here are formed by the scores of the students entering prekindergarten and are not criterion referenced to any standard.





#### COR Results by Area and Year

Figure 7 shows the proportion of students who had growth above the expected level and those whose growth was negative. A little more than 80% of the students had change scores above developmental expectations. This year the percentage of students with negative growth was somewhat less than in previous years.

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





### COR Performance By Minority Ethnicity

EV=Expected value. \* Significant at p<.01.

In social and motor skills, minorities were more likely to have positive outcomes than were white students. The differences were statistically significant. There were no detectable differences in academic skills. These results do not replicate last year's results, where minorities had significantly lower performance in academic skills and similar performance to white students in social and motor skills.





#### COR Performance By Gender

EV= Expected value. \*p<.05.

In academic and motor skills, there were no detectable differences by gender. Males were less likely to grow above expectations in social skills than females. The difference was statistically significant.

# Is quality of classroom performance linked with student performance?

No. Correlations at the aggregate classroom level were run after removing outliers (n=7) identified using stem-and-leaf graphs. The correlation between the ECERS score and the average growth COR score in the academic area was not significant (n=93, r=0.04, p>.05). Similarly, there was no significant correlation between the quality of the classroom environment and growth in motor skills (n=93, r=0.14, p>.05), or social skills (n=93, r=0.17, p>.05). Had these associations been significant, quality of the classroom would have explained 3% or less of the variation in the COR growth scores, leaving 97% or more unexplained (presumably explained by other factors).

As in past years, we also investigated this question by classifying the classrooms into quality and high quality groups based on the median ECERS score. A one-way multivariate analysis of covariance (MANCOVA) was conducted to determine the effect of high quality versus quality on COR growth variables while controlling for the proportion of minority and male students in each class. There were no significant differences in the outcomes by quality group (Wilk's Lambda = 0.943, F(3,86)=1.742, p>.05).

#### What Do These Results Mean?

Last year we detected an association between quality of the classroom environment and growth in social skills during the academic year. Data from 2001-02 failed to discover any evidence of association between quality and student performance as measured by the COR.

# 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, and 4) Peer Social Skills. Each of these scales contains 8 items: four positively worded 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. T-CRS's 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 & Hightower, 1999; 2000).

Students who scored below the 15% iles (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 were:

- 0.92 (n=1962) for Task Orientation
- 0.93 (n=1945) for Behavior Control
- 0.94 (n=1939) for Peer Sociability
- 0.90 (n=1943) for Assertive Social Skills.

# How many students have socio-emotional risk factors at entrance into prekindergarten (Time 1)?

Table 2 and Figure 10 show the percentage of students with socio-emotional risk factors at entrance into prekindergarten. Thirteen percent of students enter preschool with multiple socio-emotional risk factors, and an additional 14% enter preschool with a single socio-emotional risk factor.

#### Table 2. Student's Descriptive Information for 2000-01 and 2001-02

	2001-02	
	Ν	%
% Boys	1988	49.6%
% Minorities	1930	80.9%
Socio-emotional Risk Factors (Time 1)	1983	
No Risk Factors		74.3%
Behavior Control Only		2.8%
Assertive Social Skills Only		3.5%
Peer Sociability Only		2.1%
Task Orientation Only		4.5%
Multiple Risk Factors		12.8%

Figure 10. Prevalence of socio-emotional risk factors at entrance into prekindergarten.



#### **Prevalence of Socio-Emotional Risk Factors**

# 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 scores while controlling for minority ethnicity and gender. There were significant differences in the average COR scores by time 1 socio-emotional risk status (Wilk's Lambda = 0.809, F(15,5204)=27.74, p<.01).

#### Figure 11. Initial COR Scores by socio-emotional risk status



#### Average Initial COR Scores By Initial Risk Status

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

Pairwise comparison revealed a complex pattern. In all three subscales, differences between students with behavior control risk factor and students with no risk factors were not statistically significant. Students with multiple risk factors at time 1 had fewer skills than students with no risk factors. In some instances, students having a single risk factor (assertive skills, peer sociability or task orientation) were rated similarly to students having multiple risk factors.

The demographic characteristics of the students, controlling for time 1 socio-emotional risk profile were significantly correlated with the outcomes examined. Minority students scored about 1/3 of a point lower in all their measures (Wilk's lambda =0.949, F(3,1885)=33.48, p<.01; academic: b=-0.388,t=-9.4,p<.01; motor: b=-0.300, t=-6.7, p<.01; social: b=-0.373, t=-8.55,p<.01). Male students also scored lower than females with comparable risk factors in all three measures (Wilk's lambda = 0.968, F(3,1885)=21.03, p<.01; academic: b=-0.193,t=-6.0,p<.01; motor: b=-0.266, t=-7.6, p<.01; social: b=-0.252, t=-7.40,p<.01).

#### What do these results mean?

Students that 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 may or may not be rated lower than students with no risk factors depending on the type of risk. Students with behavior control issues but no other risk factors were rated similarly to students with no risk factors, but students with low levels of assertive social skills or poor peer sociability or task orientation were rated significantly lower than not at risk peers. These analyses are correlational so causation cannot be established. Minorities and males have additional risk, which supports previous studies and research.

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

A one-way multivariate analysis of covariance (MANCOVA) was conducted to determine the association between time 1 risk status and COR change scores while controlling for minority/ethnicity and gender status. There were significant differences in the average COR change scores by time 1 socio-emotional risk status (Wilk's Lambda = 0.98, F(15,3937)=1.85, p<.05).





Change Scores COR by Initial Risk Status

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

Pairwise comparisons based on means adjusted for minority/ethnicity and gender identified that students who had initially multiple risks grew the same amount or more during the academic year in all three areas than students who initially presented no socio-emotional risk factors. Students who had a single assertive social skills risk factor acquired more motor and social skills than their not at risk peers.

Minority/ethnicity, controlling for time 1 socio-emotional risk profile was significantly correlated with the COR change scores (Wilk's lambda =0.99, F(3,1426)=7.15, p<.01). Upon inspection, no differences between minority and white students were detected in the COR academic change score (b=0.007, t=1.5, p>.05). Minority students were likely to have higher COR change scores than comparable white students in motor skills (b=0.21, t=4.25, p<.01) and social skills (b=0.15, t=3.19, p<.01).

No differences were detected by gender on any measure (Wilk's lambda =0.999, F(3,1426)=0.703, p>.05).

#### What do these results mean?

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 or slightly faster rate than students who presented no risk initially. It appears that students who initially came to prekindergarten with lower skills and more risks gained more or as much as those students who did not have such risks. Students who initially had assertive social skills difficulties and no other risk factors acquired social skills at a faster pace than their peers. No gender differences in rate of growth were detected. Minority students had faster rates of growth than comparable white students in motor and social skills. In the academic area, minority and white students had similar rates of growth.

How stable are these risk factors over the prekindergarten year?

Figure 13. Stability of socio-emotional risk factors: Not at Risk at Time 1





89% of students, who were not initially at risk, remained so at time 2, while 8% acquired one risk and 3% acquired multiple risks.

Figure 14. Stability of socio-emotional risk factors: Single Time 1 Risk



**Stability of Single Risk Categories** 

Of the students who had a single socio-emotional risk status at time 1, 57% acquired no risk status by time 2, 27% had no change on the number of risks and 16% acquired additional risk factors.

Figure 15. Stability of socio-emotional risk factors: Multiple risks at time 1



Stability of Multiple Risk Category

Of the students that presented multiple socio-emotional risks at time 1, 55% still had multiple risks at time 2, 16% reduced the number of risks to a single one, and 29% acquired no risk status by time 2.

# Is there a relationship between quality environment and improvement of students who are at risk socio-emotionally?

No. Correlations at the aggregate classroom level were run after removing outliers (n=7) identified using stem-and-leaf graphs. The correlation between the ECERS score and the percentage of students with socio-emotional risk factors who improved was not significant (n=93, r=-0.127, p>.05). Similarly, there was no significant correlation between the quality of the classroom environment and the percentage of students who acquired additional risk factors (n=93, r=0.077,p>.05), or with the percentage of students whose socio-emotional status did not change whether students were initially at risk (n=93, r=0.086, p>.05) or had no risk factors (n=93, r=-0.012, p>.05). Had these associations been significant, quality of the classroom would have explained 1%-2% of the variation in the stability of socio-emotional factors, leaving 98%-99% unexplained (presumably explained by other factors).

#### Are at risk students more likely to improve in higher quality classroom environments?

To answer this question we followed two steps:

- 1) Aggregate the data by classroom and split the classrooms into a quality and a high quality group.
- 2) Determine if the high quality group had a higher percentage of students who improved or a smaller percentage of students who deteriorated than the quality group.

#### Aggregating by Classroom

To determine if high quality, as measured by very high ECERS 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 scores below 4.2 were identified as outliers using stem and leaf plots and removed from the analyses (n=7). The median ECERS score of the remaining classrooms was 6.4, 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 quality on the socio-emotional change variable while controlling for the proportion of minority and male students in each class. There were no significant differences in the outcomes by quality group (Wilk's Lambda = 0.967, F(3,86)=0.972, p>.05).

#### What do these results mean?

The data showed no significant association between ECERS quality and the reduction of socioemotional risk factors.

# **CURRICULUM DEVELOPMENT**

#### Were there interventions assessed by RECAP this year?

Yes, there were three interventions assessed this year.

- **Wolf Trap**: Implemented through Aesthetic Education Institute, Wolf Trap hires local practicing artists to plan and work with classroom teachers for a series of 14 classroom sessions. The focus of the three planning sessions is based on teacher-selected topics and themes, through which Wolf Trap activities are implemented. During the classroom sessions, the artists model age appropriate strategies to engage students in experiential learning activities through the arts.
- **Science Linkages**: Using hands-on science activities as a focus, Science Linkages provides in-classroom technical support and in-service opportunities for prekindergarten teachers. Trainers model strategies, based on multiple intelligences, for teaching well-integrated science, seizing upon the natural curiosity of prekindergarten students. They assist the teacher in setting up science explorations for students to use independently.
- **Building Blocks Music**: Using a curriculum based on the Music Educators National Conference (MENC) standards for music, specialists work with the prekindergarten teacher to use music as a focus and vehicle for learning. The specialists model strategies to integrate the music curriculum with literacy, mathematics and other aspects of the curriculum. Materials and musical instruments are purchased for music centers, which are set up in each classroom for students are trained to use independently.

#### How many classrooms participated in the interventions?

 Table 3. Classrooms participating in curriculum intervention

Intervention	Classrooms
Wolf Trap	14
Science Linkages	8
Building Blocks	28
Comparison Group	43

# Was there a difference in the ECERS scores of the participating classrooms?





ECERS Scores By Intervention

No. A one-way univariate analysis of covariance (ANCOVA) was conducted to determine the association between intervention participation and ECERS quality while controlling for minority ethnicity and gender. There were no significant differences in the average ECERS scores by intervention participation (F=1.01, p>.05).

Was participation in any of these three interventions associated with higher average COR change scores?



#### COR Performance by Intervention

Figure 17. COR change scores by intervention

No. A multivariate analysis of covariance (MANCOVA) was conducted to determine the association between participation in the interventions and academic, motor and social classroom average COR change scores while controlling for quality of the classroom, proportion of students with minority ethnicity and gender. There were no significant differences in the average COR change scores by intervention (Wilk's Lambda=0.936, F(3,86)=0.629, p>.05).

The lack of statistical significance in these results is not surprising given the very low statistical power, i.e., the relatively few classrooms for each intervention.
## PARENTAL SATISFACTION WITH THE PRE-KINDERGARTEN PROGRAM

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 18 shows the grades for the overall program.

#### Figure 18. Parental Satisfaction with Program



RECAP Annual Report (2001-2002) Early Childhood Parent Survey (ECPS / Satisfaction) Overall Program Grades - Inclusive of all Programs n=840

Grade

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

Compared with parental satisfaction results in 2000-01, parents were slightly less satisfied in the overall sense, and with the learning environment and with teachers in particular. Parents were more satisfied this year than last year with how programs address parent needs, child needs, administration and the building, room and equipment. These differences are quite small, and not significantly different..

#### Figure 19. Parental Satisfaction with Program



1 = 1999-2000 2 = 2000-2001 3 = 2001-2002

## Was there variation in parent satisfaction by program?

Yes. There is some variation across programs; yet all programs scores a B+ or above.





\* Programs D, H, L and M each had less than 17 responses Program G left RECAP in 2000-2001

## With what are parents most and/or least satisfied?

Overall, parents are very satisfied with the early childhood programs. Between 99 and 100 percent of parents surveyed say that their child is learning how to get along with other students, the teacher greets their child when he or she arrives at the classroom, their child feels safe at school, the classroom has many books that the children can use everyday, parents feel comfortable talking with the child's teacher, their child is busy and involved in the classroom every day, teachers listen carefully to the children in their classroom, and the teacher is friendly to their child.

However, there are a few areas that have somewhat less satisfaction: only 52% say that their child brings home books for them to read to him/her, 75% of the parents say their child's teacher usually asks short "yes/no" type questions while only 55% say children are usually asked questions that need long answers. In addition, 15% say they do not know the center's administrator or director and 59% say the teacher constantly tells their child what to do.

## **RECAP DESCRIPTION**

The Rochester Early Childhood Assessment Partnership (RECAP) started in Rochester, New York in 1992 to address the growing need for understanding and improving the effectiveness of pre-kindergarten 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 Universal Pre-kindergarten, New York State's fastest growing education initiative.

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

RECAP provides useful data analysis on the status of our early childhood programs including: 1) parent satisfaction and interests in child development, programs, agencies, and support services, 2) classroom observations of adult and child interaction and environment and 3) child-specific information on motor development, speech and language development, school skills, and socio-emotional adjustment.

Confidentiality of all our participants is maintained in all areas and is of the utmost importance to our partnership.

## Measure Distribution and Collection

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

Three times during the year (fall, winter, and spring), the RECAP team 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.

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. Parent Satisfaction Survey is distributed for parent completion in February.

Programs return completed measures to RECAP for processing. The measures are checked for accuracy and the data are entered. Individualized reports are produced and returned to programs along with original instruments within 4 to 7 days. Reports include individual child and group profiles of outcomes and parent feedback. Reports may be used immediately by program staff to identify strengths, needs, and to set goals for program, children, and families. RECAP offers support to program staff with interpretation of reports. This takes place in group and/or individual meetings. Many partners prefer individual meetings at their sites.

## **Partner Development**

RECAP provides training to directors, teachers, and parent support staff for use of the measures. In September the RECAP project coordinator contacts sites to set up appointments with new teachers, directors, and other staff as a personal introduction to RECAP and to review and extend information provided during the group orientation. These individual and small group meetings at program locations are reported to be helpful for new and experienced program staff.

Summary of Training and Number of Participants (Please note description of training programs below)

Orientation: 35 program staff participated in orientation activities this year.

Child Observation Record (COR) Training: 48 prekindergarten teachers were trained.

ECERS Introductory Training: 43 teachers, assistant teachers, and parent support staff were trained. Also, we provided ECERS Training for a group of 20 Head Start Education Managers and Administrators from our Philadelphia collaboration.

Master ECERS Observer Training: 8 new master observers were trained and 24 experienced master observers participated in additional training.

## Orientation

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 professionals to link with each other.

The RECAP project coordinator meets frequently at prekindergarten 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 staff obtains at large group orientation and are able to be individualized to meet unique program needs.

## **Directors/Teachers Meetings**

One teacher meeting was conducted during the year. But, the predominant need of partners is individualized questions and answers through the project coordinator. This quickly and efficiently facilitates day to day communication and is less disruptive in regards to staffing issues for program staff if they leave the building for an off site meeting.

Orientation, COR Training and ECERS Introductory Training are three formal training requirements during the year, particularly for new staff who would be in attendance at all three trainings. For this reason the project coordinator facilitates regular communication with program staff at their sites or through other communication means (e.g. telephone, e-mail).

## **COR Training**

Before any teachers use the Child Observation Record (COR) they must be trained in its use. In the fall, RECAP provides COR training for all teachers not previously trained and for experienced teachers who feel they will benefit from additional training. A three-hour session covers COR components, child observation techniques, and hands on training for documenting and scoring techniques.

## **Classroom Observations and Related Training**

The classroom observation process takes place over four months. Training starts in January. Observations take place in February, March, and April. RECAP uses the Early Childhood Environment Rating Scale (ECERS).

*Introductory ECERS Training* consists of a three- to four-hour program available to all RECAP partners. This training program introduces participants to the ECERS, general principles of observation, and its use for program assessment and quality improvement, and practice of observation and scoring techniques. Participants also learn about the logistics of the classroom observation that will occur in the coming months.

*Master Observer Training* consists of a fifteen-hour program for the first year of training. For observers beginning a second 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 reviewed carefully. Master observers are trained to attain and maintain a high level of inter-rater reliability. Master observers are recruited from the Rochester area and are selected on the basis of their experience in early childhood education, program observation, and interest to participate. Eight (8) new Master Observers were trained this year.

One hundred and seventeen classroom observations were conducted this year. Among these, 31 classrooms were observed by two observers simultaneously to gather inter-rater reliability data, which is useful in training observers and to assure that a high standard of reliability is maintained.

In brief, the following process is repeated for each observation:

- Observer contacts the classroom teacher to arrange for an observation date
- Classroom observation occurs (2.5 to 4 hours)
- Observer conducts an interview with the teacher immediately after the observation is completed to obtain information not evident during observation
- Observer completes score sheet and submits it to RECAP for processing
- Project coordinator reviews score sheet for accuracy
- Score sheet is checked again for accuracy by data clerks, 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
- Teacher reviews information
- If teacher wants a formal review of the report, he/she initiates a collaborative review process (outlined below)

## **COLLABORATIVE REVIEW REQUESTS**

As part of the classroom observation process using the ECERS, RECAP provides a review process if any teacher believes there is a discrepancy in the ECERS score and its representation of the classroom program. In the collaborative review, teachers are welcomed and encouraged to address questions they have about any of the 470 quality indicators.

Collaborative Review Request Procedure:

- 1. After a classroom observation is complete, the independent observer returns the completed score sheet to the RECAP team for processing. We maintain confidentiality in our reporting processes. A copy of the score sheet and summary report is returned directly to teachers along with a cover letter that serves as a guide for teachers in their review of the report. In this letter is an invitation for the teacher to contact us if she/he feels a score does not an accurately represent her program.
- 2. If a teacher questions any item(s) and wishes to formally address this, she/he contacts the RECAP project coordinator to obtain a Collaborative Review Request Form. Using this form, she/he outlines the details of the item(s) in question with additional supporting information, which is used in the decision-making processes.
- 3. Upon receipt of the Collaborative Review Request, the project coordinator reviews the information provided, 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 letter to the teacher, the project coordinator formally addresses each item in question with an explanation of the decision whether or not to change the item score(s). A second 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 program's ECERS information in our database.
- 6. If the teacher informs us that she/he remains unsatisfied with the results of the process thus far, we will make arrangements for a second independent observer to conduct another full observation and submit a formal report. To date, we have not been made aware of dissatisfaction with the collaborative review process and have not conducted a second observer of any classroom.

#### Table 8. Summary of requests

Summary of Results	2000	2001	2002
Number of review requests	24 out of 145 reports	8 out of 116 reports	24 out of 117 reports
Percent of total	17%	7%	21%
Total number of items reviewed	161	33	140
Total number of items changed	84	28	76
Average change in overall score	2.6	.15	.23
Range in change in overall score	.5-9.0	03	05

Most indicators reviewed for 2000 are in the "Activities" section, (this includes Fine Motor, Art, Music/Movement, Blocks, Sand/Water, Dramatic Play, Nature/Science, Math/Number, Use of TV, Video, and/or Computers, and Promoting Acceptance of Diversity). The remaining indicators are dispersed among other categories.

There is no significant trend in 2001, but of those reviewed, the indicators most reviewed are in the "Parents and Staff" (Provisions for Personal Needs of Staff), "Activities" (Math), and "Space and Furnishings" (Child Related Display) sections of the scale.

In 2002, among the forty-three items of the ECERS, the average number of review requests per item was four. The items that had the highest number of requests included Space for Gross Motor, Books and Pictures, Art, Music/movement, Blocks, Dramatic Play, Promoting Acceptance of Diversity, Schedule, and Provisions for Personal Needs of Staff.

## **COMMUNITY OUTREACH**

Formal reports for teachers and directors are one form of data dissemination to teachers and programs. But, there are other ways RECAP informs the community of its work.

We submit articles summarizing results to the Rochester Association for the Education of Young Children (RAEYC) newsletter, which has a wide distribution to early childhood professionals, various organizations, and parents in the Rochester area.

In October, Children's Institute hosted three sessions in which findings from the 2000-2001 Annual Report were presented to program partners. Attended by 40 program staff (e.g. teachers, parent support staff, education specialists, directors, administrators), the presentation format and the results overall were well received. The format also provided opportunities for questions and answers and enhanced understanding of the print version of the report that is distributed annually to all individual program staff. These sessions were also a forum for programs to celebrate their work within their professional peer group among several agencies and across the Rochester early childhood education community at large.

On December 4<sup>th</sup>, a press conference was held at Children's Institute, announcing the final results from the 2000-2001 Annual Report. The report concluded that Rochester's prekindergarten programs perform at the highest levels being reported in the United States.

Speakers included Jacqueline P. Cady, Chair of the Early Childhood Development Initiative; Dr. A. Dirk Hightower, Executive Director of Children's Institute; Dr. Clifford Janey, Superintendent of the Rochester City School District; Rosemarie Muscolino, site director at Holy Family School; and Christine Blocker, a mother of five children who participated in Rochester prekindergarten programs.

RECAP was hailed for its crucial role in improving prekindergarten quality and solidifying the signature community collaborative.

## **EXTENSION OF SERVICES AND COLLABORATIONS**

RECAP continues to demonstrate great potential for diversity, collaboration, and expansion. Our work in this area is well established and continues to broaden.

## **RECAP Family and Community Study**

While characteristics of family and community are certainly important to child development, there is little understanding of the specific processes by which these characteristics impact young children, particularly within education. Therefore, the RECAP Family and Community Study was designed to closely examine family and community characteristics that may influence children's academic success from beyond the classroom. RECAP, in conjunction with the Catholic Diocese of Rochester, the Rochester Preschool Parent Program, the Family Resource Centers of Rochester, and the University of Rochester, has completed data collection with a total of 71 families. By concentrating on a smaller number of families, and thereby being able to spend additional time with each family, researchers were able to gather more in-depth information about family and community attributes as seen through the eyes of parents and children. Efforts are now focused on looking at data in consideration of how characteristics such as family and community environment and stability, family routines, and parent-child relationship and communication qualities influence children's socio-emotional and academic adjustment. For example, one study is underway to examine how different ways in which parents discuss events with their children can alter the impact of family and neighborhood in stability on children's feelings of family security and coping efficacy; preliminary results suggest that while stressful events are deleterious to children's perceptions of security, the ways in which parents explain such events can also protect children from such impact. Implications are far reaching both in terms of potential prevention and intervention techniques as well as in furthering scientific knowledge about children's formation of expectations that are known to impact their social and academic development.

## **Family Day Care**

After an in depth feasibility study and extensive recruitment process in the Rochester area, we piloted inclusion of family day care providers in RECAP. This year fifteen providers, six from our recruitment efforts, and nine who, in addition to the original six providers, were part of ScienceStart for Family Day Care Providers, a local workshop series managed by Partnerships in Caring, a research group of the University of Rochester.

The Providers received Orientation and Child Observation Record (COR) Training (see description of these under "RECAP Description" in this report). Providers were responsible for completing the Teacher-Child Rating Scale and Child Observation Record (COR). Parents were requested to complete Parent Child Rating Scale, the Preschool Parent Support Questionnaire, and the Parent Questionnaire.

Our assessment team was in close communication with the Rochester Family Day Care Satellite Network and its Coordinator throughout our recruitment and operational efforts. This office was extremely supportive of providers in their efforts to participate and of their opportunity to represent this child care arena within RECAP.

For most of the providers, participation in this evaluation partnership and the potential it would bring them for training, participation in a community collaborative, and the benefits of evaluation services was positive. Unfortunately, for the majority of the providers, the ability to complete the necessary observation tools, as well as to ask parents to complete their measures, was too much of an additional burden within the demands of the operational day.

Typically, providers are caring for several children of various ages, for ten to twelve hours per day. The established RECAP evaluation model, which was developed for prekindergarten programs in schools and child care centers, was not a good fit for family day providers. Family day care programs have several qualities unique to this type of care which are different from early childhood programs in schools and child care centers. The RECAP workgroup will continue to consider any other evaluation models that may better complement the operational demands and interests of family day care providers.

Part 2

Executive Summary of First Grade Follow-up Study

First Grade Follow-up Study

# FIRST GRADE FOLLOW UP STUDY OF RECAP GRADUATES

September, 2002

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## **EXECUTIVE SUMMARY**

This report summarizes data on 1,094 children who:

- at least 4 and not five by Dec 1<sup>st</sup>, 1998 (universal pre-k age criterion), and
- completed 1<sup>st</sup> grade Stanford 9 reading comprehension and mathematics tests in 2001 in the Rochester City School District (RCSD).

The sample was characterized by high levels of attrition, for unknown reasons. Students who had participated in RECAP were less likely to have RCSD 1<sup>st</sup> grade test data than students who had not participated in RECAP.

- The students with RECAP experience were demographically similar to the students with no RECAP experience in terms of gender, minority ethnicity and maternal education. In this sample of same age children (at least 4 and not five by Dec 1<sup>st</sup>, 1998) children with RECAP experience were slightly older than children without RECAP experience.
- 39% of the students met standards in mathematics and 37% met standards in reading comprehension in 1<sup>st</sup> grade.
- There were no differences based on preschool background. Students who participated in RECAP classrooms did not perform better or worse, than students with other backgrounds. Students who attended private, community universal pre-k sites or preschools operated by the Rochester City School District performed similarly in both reading and mathematics. No differences remained after controlling for age, gender, race and maternal education.
- Children of better educated mothers were 26% more likely to meet the reading comprehension standard and 24% more likely to meet the mathematics standard than comparable children of less educated mothers.
- Minority students were 31% less likely to meet the reading comprehension standard and 49% less likely to meet the mathematics standard after controlling for RECAP experience, gender and maternal education.
- Females, when compared to males, were 30% more likely to meet the reading comprehension standard and equally likely to meet the mathematics standard.
- Older students (by six months) were 52% more likely to meet standards in math and 88.5% more likely to meet standards in reading comprehension.

## INTRODUCTION

What is the purpose of the follow up study?

To compare the performance of RECAP students with students who did not attend RECAP centers on 1<sup>st</sup> grade reading comprehension and mathematics.

How was the sample obtained?

At entrance into kindergarten both in the Rochester City School District and in the Catholic Diocese schools in the City of Rochester, parents complete the Parent Appraisal of Children's Experiences (PACE), a measure that provides a historical overview of the child's experiences before entering kindergarten. The sample was selected using 1999-2000 PACE data. All students in kindergarten were selected. To determine whether these students had attended RECAP centers the 1998-99 RECAP information was used. Performance data for first grade Stanford Achievement Tests (SAT 9) was obtained by following the 1999-00 PACE cohort into RCSD's 1<sup>st</sup> grade for 2000-01. Finally to ensure that age did not influence results, as well as to provide accurate information regarding the universal pre-k funding stream children who were 4 years of age as of December 1<sup>st</sup>, 1998 and less than 5 were selected. This procedure obtained data for 2272 students. 74.6% had not attended RECAP centers in 1998-99, 25.4% participated in RECAP centers in 1998-99.



## **ATTRITION OF THE SAMPLE.**

Attrition occurs when there is initial data for a subject, but no follow up data. Reasons for attrition include not attending RCSD schools, not in 1<sup>st</sup> grade in 2000-01, or not tested in 2000-01.

Table 1 shows the attrition in the sample. There was considerable attrition for both groups (RECAP and not RECAP). The RECAP group had 18% higher attrition for unknown reasons. This difference was statistically significant ( $\chi^2(1)=28.06$ , p<.01).

Table 1.	Attrition	in	Follow	Up	Sam	ple

RECAP Status in 1998-99	Total N	Attrition	Complete Data for Analysis
Participated (RECAP)	576	60.8%	39.2%
Did not Participate (Not RECAP)	1696	48.0%	52.0%

## RESULTS

What is the demographic composition of the sample?

Table 2 shows the demographic characteristics of the sample. The sample is evenly divided between boys and girls. White students comprise 18% of the sample, African Americans 63%, Hispanics 17%, and 2% students were members of other races. No significant differences in ethnic or gender distribution by RECAP group were detected.

There were slight differences in the maternal education between groups. The Not RECAP group has a higher percentage of mother's without high school diplomas and with high school diplomas, while the RECAP group has a higher proportion of mothers who had obtained 2-year college degrees or had attended college. These differences are statistically significant ( $\chi^2$ =19.326, p<.01).

	<u>ALL</u>	Not RECAP	RECAP
	<u>(N=1094)</u>	<u>(N=869)</u>	<u>(N=225)</u>
Gender		χ <sup>2</sup> =0.006	i, p>.05
Female	49.5%	49.8%	49.8%
Male	50.5%	50.2%	50.2%
Race/Ethnicity		χ <sup>2</sup> =0.887	, p>.05
White Non-Hispanic	18.3%	17.7%	20.4%
Minority	81.7%	82.3%	79.6%
African American	62.80%	61.91%	66.22%
Hispanic	16.45%	17.84%	11.11%
Other			
Mother's Education		χ <sup>2</sup> =19.326	6, p<.01
Some High School	27.0%	27.9%	23.6%
GED	17.5%	17.4%	17.8%
High School Graduate	25.6%	26.6%	21.8%
Technical/vocational school	2.4%	2.5%	1.8%
Some College	12.1%	10.3%	19.1%
2-year college degree	9.4%	8.8%	12.0%
4-year college degree	3.5%	3.7%	2.7%
Graduate Degree	2.7%	3.0%	1.3%

Table 2. Demographic Characteristics of the Sample.

Note: Percentages rounded, may not add up to 100%.

Children who attended RECAP were slightly older (M= 4.55, SD=0.26) than children who did not attend RECAP (M=4.51, SD=0.29, F=3.96, p<.05). When maternal education is treated as a continuous variable, there are no significant differences between the RECAP (M=3.28, SD=1.92) and not RECAP groups (M=3.06, SD=1.96, F=2.39, p>.05).

How was performance measured?

Performance measures were based on the results of Stanford 9 1<sup>st</sup> grade reading comprehension and mathematics achievement tests. The results are expressed in three different ways: Raw scores (raw).

For reading comprehension raw scores range from 1 to 40.

For math the raw scores range from 1 to 69.

- Each raw point corresponds to a multiple choice question answered correctly.
- NY State Performance Levels (levels).
  - Level 1: Students do not meet the learning standards. Their performance shows minimal understanding.
  - Level 2: Students show partial achievement of the learning standards. Their performance shows partial understanding.
  - Level 3: Students meet the learning standards. Their performance shows thorough understanding.
  - Level 4: Students exceed the learning standards for English Language Arts. Their performance shows superior understanding.

Met or did not meet NY State Standards (standards).

A student met NY State standards if he/she passed the test (i.e. scored at level 3 or above).

Why are analyses performed on all three permutations?

Statistically, the raw scores are a better measure because the levels and the standards collapse various level of raw performance. However, levels and standards are very useful in communicating results to the public.

Did RECAP students meet NY state standards at a higher rate than non-RECAP students?

No. Overall, a little over 1/3 of the students met standards. There were no significant differences between the RECAP and the non-RECAP groups. Results of the inferential tests and descriptive information are contained in Table 3.

	ALL	Not RECAP	RECAP
Mathematics		χ <sup>2</sup> =0.418, μ	>.05
Met NY State Standards	38.57%	38.09%	40.44%
Did not meet NY State Standards	61.43%	61.91%	59.56%
Reading Comprehension		χ <sup>2</sup> =0.019, μ	>.05
Met NY State Standards	36.93%	36.82%	37.33%
Did not meet NY State Standards	63.07%	63.18%	62.67%

Table 3. 1<sup>st</sup> Grade NY State Standards & RECAP Experience.

Were there differences in the likelihood of meeting standards after adjusting for gender, ethnicity and mother's education?

No. Logistic regressions failed to detect associations between RECAP experience and likelihood of meeting NY State standards after controlling for gender, minority ethnicity, age and maternal education. See Table 4.

However, children of better educated mothers were 26% more likely to meet the reading comprehension standard and 24% more likely to meet the mathematics standard than comparable children of less educated mothers.

Also, minority students were 31% less likely to meet the reading comprehension standard and 49% less likely to meet the mathematics standard after controlling for RECAP experience, gender and maternal education.

Females were 30% more likely to meet the reading comprehension standard and equally likely to meet the mathematics standard as comparable boys.

Older students (by six months) were 52% more likely to meet standards in math and 88.5% more likely to meet standards in reading comprehension.

Table 4. Logistic Regression	s on Meeting NY State Standards.
------------------------------	----------------------------------

	Mathematics	<u>Reading</u> Comprehension
<u>Variables</u>	Odds	Ratios
Gender (female)	0.97	1.30*
Minority Ethnicity	0.51**	0.69*
Age (in years)	2.04**	1.77*
Maternal Education	1.24**	1.26**
RECAP Experience	0.99	1.07
* . 05 * * . 01		

\*p<.05, \*\*p<.01.

Were there differences in performance based on performance level?

No. Analyses for mathematics ( $\chi^2$ =0.697, p>.05) and reading comprehension ( $\chi^2$ =1.64, p>.05) by level found no significant differences between the RECAP and non-RECAP group.

Table 5. NY State Levels of Performance by RECAP Experience.

	ALL	Not RECAP	RECAP
<u>Mathematics</u>		χ <sup>2</sup> =0.697, p>.05	
Level 4	6.76%	6.79%	6.67%
Level 3	31.81%	31.30%	33.78%
Level 2	47.26%	47.41%	46.67%
Level 1	14.17%	14.50%	12.89%
Reading Comprehension		χ <sup>2</sup> =1.644, p>.05	
Level 4	16.09%	15.54%	18.22%
Level 3	20.84%	21.29%	19.11%
Level 2	49.73%	49.48%	50.67%
Level 1	13.35%	13.69%	12.00%

Were there differences in the raw scores of both groups?

No. The RECAP group had average scores ( $M_{RC}$ =25.68,  $M_M$ =44.16) similar to the non-RECAP group ( $M_{RC}$ =25.14,  $M_M$ =43.12).

After controlling for age, maternal education, gender and minority ethnicity; were there differences in the raw scores of both groups?

No. Regressions were able to explain 10 and 12% of the variation in reading comprehension and mathematics raw scores.

§ Girls had higher scores, by about 1 raw point, than comparable boys in the reading comprehension test. Boys and girls score similarly in math.

- § Minority students had lower math (about 5 points) and reading comprehension (about 3 points) than comparable white students.
- Students who were 6 months older scored higher in math (about 3 points) and reading comprehension (about 1 <sup>1</sup>/<sub>2</sub> points).
- § Students with more educated mothers scored higher in math (about 2 points) and in reading comprehension (about 1 point).
- § Past experience in RECAP was not associated with higher scores.

In the Stanford 9 1<sup>st</sup> grade tests, a point is a multiple-choice question answered correctly.

	<u>Mathematics</u>	<u>Reading</u> Comprehension
Variables	R <sup>2</sup> =0.12	R <sup>2</sup> =0.10
Gender (female)	0.02	0.97*
Minority Ethnicity	-4.60**	-2.56**
Age (in years)	6.69**	3.03**
Maternal Education	1.69**	1.11**
RECAP Experience	0.25	0.09

Table 6. Regressions on Stanford 9 1<sup>st</sup> Grade Raw Scores

\*p<.05, \*\*p<.01.

Is there any evidence that higher quality RECAP experiences are associated with increased test scores?

No. For the 225 students with RECAP experiences, the ECERS quality of the center they attended is uncorrelated with both the raw math (r=-0.03, p>.05) and reading comprehension (r=0.10, p>.05) scores; and also uncorrelated with meeting the NY State standards in reading comprehension (r=0.08, p>,05) or math (r=-0.02,p>0.05).

Is there any evidence that students who attended the Rochester City School District (RCSD) had different results from the other RECAP centers?

No. Although not-RCSD RECAP students were slightly more likely to meet standards in both reading comprehension and mathematics, the difference among the three groups was not statistically significant.

	RCSD - RECAP	Not RCSD –	Not RECAP
	<u>(N=120)</u>	<u>RECAP</u> (N-105)	<u>(N=869)</u>
		<u></u>	
<u>Mathematics</u>		χ <sup>2</sup> =0.902,	p>.05
Met NY State Standards	38.33%	42.86%	38.09%
Did not meet NY State Standards	61.67%	57.14%	61.91%
Reading Comprehension		χ <sup>2</sup> =1.127,	p>.05
Met NY State Standards	34.17%	40.95%	36.82%
Did not meet NY State Standards	65.83%	59.05%	63.18%

Table 7. 1<sup>st</sup> Grade NY State Standards & RCSD Experience.

Regression analyses on the raw scores found no differences among the three groups after controlling for race, gender, age and maternal education.

Is there any evidence that students who attended the universal pre-k community sites had different results from the other RECAP centers?

No. Although the UPK community group had slightly higher proportion of students meeting standards the differences were not statistically significant.

Table 8. 1<sup>st</sup> Grade NY State Standards & RCSD Experience.

	<u>RCSD</u> <u>UPK/EPK</u> (N=120)	<u>UPK</u> <u>Community</u> <u>(N=39)</u>	<u>RECAP</u> <u>NOT UPK</u> <u>NOT RCSD</u> <u>(N=66)</u>	<u>NOT RECAP</u> ( <u>N=869)</u>
Mathematics			χ <sup>2</sup> =1.187, p>	.05
Met NY State Standards	38.33%	46.15%	40.91%	38.09%
Did not meet NY State Standards	61.67%	53.85%	59.09%	61.91%
Reading Comprehension			χ <sup>2</sup> =2.733, p>	.05
Met NY State Standards	34.17%	51.28%	36.36%	36.82%
Did not meet NY State Standards	65.83%	48.72%	63.64%	63.18%

UPK = universal pre-k. EPK = experimental pre-k.

Regression analyses on the raw scores found no significant differences among the four groups after controlling for race, gender, age and maternal education.

Part 3

Providers' Views

Rusti Berent, Ph.D.

Executive Director

Family Resource Centers of Rochester

#### Provider's Perspective: Family Resource Centers of Rochester Rusti Berent, Ph.D., Executive Director

Family Resource Centers of Rochester (FRCR) has been involved in evaluating our programs from the very earliest days of our history, dating back to 1981. Our founder, Carolyn Micklem, was one of the first participants in the new initiative of what was later to become RECAP. Carolyn's vision for FRCR had a strong evaluation focus, and in 1994 she hired me as Evaluation Manager. My participation in RECAP became integral to my job and in many ways was the best part of my work. Through RECAP, I got support, affirmation, challenged, and most important, the chance to make a significant difference in the lives of children, parents, and preschool teachers in our community.

Because I work very closely with staff who provide direct service to program participants, I hear and see many issues from staff and participants. These include issues that may not be obvious to some of my colleagues in the community who may have little or no contact with the beneficiaries of our work. At the same time, I am trained as an academician and professional evaluator, so I know firsthand the responsibilities and predilections of researchers.

Straddling the gap between research and practice is not easy. I must deal with criticism from both sides, debate people who are specialists where I am a generalist, and consider the interests of three groups of people: those who do the studying, those who are being studied, and the teachers who have the responsibility for collecting the information. While I care deeply about research, my contribution to RECAP is as a provider. My charge is to keep the interests of the teachers, parents, and children in the forefront. If it sounds like a lot, it is. But the RECAP team is incredibly responsive, and the rewards of RECAP participation are returned to me and our community four-fold.

As a RECAP member, the Family Resource Centers of Rochester often participates in pilot projects. Our participation gives us a real advantage in both research and practice, because we test new instruments, and we get to share in the wisdom of our RECAP partners through reports, trainings, professional development, networking, and resource and information sharing. As providers, we are also part of an information loop that insures that the work RECAP asks of us is useful, respectful, and strength-based.

From the instruments that are part and parcel of RECAP we have learned so much. From the ECERS and Parent Satisfaction Surveys we have learned and implemented best (or better) practices. From the assessments of the children through the Child Observation Record (COR), the Teacher-Child Rating Scale (T-CRS), and the Parent-Child Rating Scale (P-CRS), we have learned how children grow cognitively and emotionally and how to support their learning. From other information provided by parents we have learned how important our programs are to the social support of parents and to the community at large. We have learned how to meet the needs and expectations of parents. In short, RECAP has allowed us to grow as theorists, be on the cutting edge as practitioners, and to give our participants the very best of ourselves.

As a result of our participation in RECAP, we have improved program practices in our classrooms and programs. For example, through strategically placed books and reading and writing areas in the classroom, we explicitly link literacy to classroom offerings. We have

increased accessibility and use of materials for the children through more clearly defined interest areas that increase children's ability for self-directed exploration and exemplify for parents the important relationship between play and learning. We have increased parent involvement in our program and we have created a workplace more friendly to and supportive of staff.

RECAP helps insure that our programs achieve and maintain high quality. However, one year of high quality early childhood education alone is not enough to sustain positive growth in our children. I believe that RECAP can and must continue to identify and explore additional correlates of long term outcomes. For example, there are many programs for three year olds that would benefit from participation in RECAP and contribute important insights to our knowledge and practice. If RECAP were able to study programs for three year olds on a large scale, we would have the chance to learn more about the impact of early education and what more it takes to insure success for the children and families.

Second, strong parental involvement in their children's education must be a part of any urban early childhood program. Parent programs that are linked to what the children are learning can help establish positive patterns and behaviors in families that will support the children when they enter the formal educational system. I believe that more intensive study of the parent support and involvement that accompanies the preschool programs would help us learn just how critical that support is to children's success in school. Most importantly, we would identify ways to increase that support and put knowledge into practice so that children and their parents strengthen their bond as partners in learning.

Finally, we must be sure that kindergarten, first, and second grade programs are as strong as their preschool counterparts. Forging a link between preschool and early elementary school can help children and parents bridge the gap between home and school and deepen their connection to education and their understanding of educational systems. It is crucial that our early efforts continue to be supported and enhanced through early elementary school. The children and the teachers and parents must feel empowered and supported. RECAP involvement in these grades has the potential to facilitate the positive feelings that lead to positive outcomes.

Our community and our country know that investment in our very youngest students builds the strongest foundation for the growth of future generations. In Rochester, RECAP is the mortar that helps keep the foundation solid and strong. I am grateful to RECAP for all that it has provided to me, to our staff and participants, and to the community at large. My hope is that RECAP will continue to grow and become an even stronger force that will serve as a model for other communities. My heartfelt thanks go to all RECAP participants whose hard work and commitment have taken this partnership from a great idea to the wonderful reality that it is.

Julia Guttman and Mary Temple Rochester Preschool-Parent Program Mary Temple and Julia Guttman

The contributions RECAP has made to the improvements in the Rochester Preschool-Parent Program (RPPP)

Editor's Note: Its 1937 roots make The Rochester Preschool-Parent Program (RPPP) one of Rochester's oldest prekindergarten programs. From its beginning RPPP has had a tradition of evaluation and continuous improvement. More recently, for the past 5 years, RPPP was one of the first programs involved with the in-depth RECAP evaluation.

RECAP's first published study, the Retrospective Study of Preschool Effectiveness in Rochester, NY (1997), was especially beneficial to the work being done by the Rochester Preschool-Parent Program, in key areas:

- Staff Affirmation: This study demonstrated to our own staff RPPP's effectiveness. In the annals of "staff affirmation," we certainly received a welcome morale boost when RECAP presented the positive findings of our program through the Retrospective Study.
- Legitimacy to our funding sources: The Retrospective Study showed that the trust our funding sources placed in RPPP was and is fully justified. This study certainly heightened our funders' and our entire community's awareness and value of early childhood education.
- Legitimacy to parents: This independent report confirmed for parents that RPPP was an excellent choice for both their preschool-aged children, as well as for parents' own development.
- Long-term effectiveness: This report served as proof to parents, staff, and professional colleagues that developmentally appropriate practice was effective at the preschool level in providing a strong foundation for children's math, and reading in second and third grades.

RECAP contributed the Early Childhood Environmental Rating Scale (ECERS), the Child Observation Record (COR), the Teacher-Child Rating Scale (T-CRS) and other measures and processes.

One way in which RECAP has helped RPPP was with the adoption and use of the Early Childhood Environmental Rating Scale (ECERS). While the Retrospective Study was affirming, it did not tell us how to improve, nor was it intended to. The ECERS very clearly showed the "road map" to both our teachers and administrators, regarding where to improve and specifically how to improve.

The ECERS, as an internationally recognized and adopted measurement tool, allowed us to compare our performance with that of other programs. Our solid performance compared with other national studies brought us credibility with our parents, funders and our community.

RECAP's initial training provided an introduction for using the COR, T-CRS, and ECERS, as well as the customized attendance system. From these annual trainings a foundation of quality was developed from which RPPP, as a program, could follow-up with ongoing supervision, mentoring and additional focused experiences.

For example, the ECERS improved our ability to mentor new teachers. Its clear standards of quality in multiple areas provided an objective framework that guides teachers on many important aspects of classroom practices. The ECERS reports make available by RECAP provided feedback as to where we were "on target," and where we needed to improve.

The Child Observation Record (COR), which is used to assess children's development in cognitive, motor and social areas, has also proven extremely valuable. Once again, as a nationally recognized measure, the COR expanded, enriched and reinforced practices in the prekindergarten classroom and provided specifies for raising parent awareness of many components of the prekindergarten classroom. It has also facilitated communication and follow- through with kindergarten teachers and school administrators.

Many of the instruments used in RECAP have helped our staff in eliciting parents' responses as to how and why our program is operated. Parents feel more involved and RPPP is better able to meet parents' needs, or at least have the opportunity to explain reasons for decisions or practices that are followed.

RECAP has also provided the technology to improve some forms and generate data showing strengths and weaknesses of program operations (e.g., Parent Questionnaire, Parent Survey, Attendance System, Health Forms).

Another contribution RECAP has made is the computerized Attendance System and its reports. This relatively simple, tracking system for both children and parents has been extremely helpful to teachers, parent group leaders and the RPPP leadership, in effectively targeting our program's actions. Each year, this system saves RPPP staff untold hours of "administrivia."

What Changes Did RPPP Make, Based on RECAP's Information System?

1. We focused intensely on the ECERS for <u>all</u> staff (Children's Teachers, Parent Group Leaders, Paraprofessionals and Mentors). We involved staff input in problem-solving, how to understand and meet the new requirements, and be sure "all bases were covered."

2. Our staff responded to the data generated by the ECERS; for example, by ordering specific equipment and instructional materials to upgrade classrooms (especially in science/nature and soft furniture).

3. The ECERS made a significant impact on our approach to teacher mentoring: As teachers became more aware of what constitutes quality, many became more receptive to coaching and mentoring.

4. The ECERS helped make data less intimidating, which was no small accomplishment. As a program we spent more time making the data available to all staff, examining and explaining it and its implications, then allowing time for individuals to make plans for improvement.

5. With RECAP taking over the Attendance System, it relieved RPPP from much of the detail work, plus we received meaningful data that was used for other reports, as well as monitoring the specific and overall attendance information about our program.

6. As a result of the tallying of the pre- and post data from the Parent Questionnaire, staff was helped to focus on individual interests with regard to children and with regard to themselves.

Recommendations for RPPP's Future in Partnership with RECAP

- 1. Continue the meetings of involved administrators and other early childhood education leaders, to update them on RECAP'S plans and offerings for each year.
- 2. Invite those interested to be part of an ongoing focus group of administrators and mentors. (e.g., To discuss how to implement the findings from ECERS, or other related topics)
- 3. Continue being a centralized source for training and materials for ECERS, COR, and Attendance.
- 4. Continue your research and informing programs (and community) of the results.
- 5. There is one area of improvement that we recommend to RECAP: RECAP is lacking parent input. What about having parent representation on the RECAP committee? Or have parent consultants from each program, who would be called together when a parent point of view would be considered? What about getting parent input on the "Parent Support Questionnaire?"
- 6. Specifics focused on ECERS and ECERS raters' training:
  - a) Express your expectations of more time being used by ECERS' raters, especially in terms of their questions to teachers. (In some cases, no time was given to this part of the process, because of Raters' tight schedules.)
  - b) In RPPP, where there are two different teachers in the same classroom, we recommend having the same rater for both morning and afternoon classes. (Last year the difference in ratings by different visitors for basic classroom environment challenged the credibility for the process, resulting in also undermining credibility for the tool, and the research results).
  - c) Consider further training for experienced ECERS raters. Because of our intensive training, many of the RPPP staff was more knowledgeable than some of the raters, especially in regards to the new information, so more training would seem desirable, even for at least some of the most experienced raters.
  - d) Where <u>possible</u>, (and without costing RECAP any additional funds), we recommend pairs of raters making ECERS visits, then discussing and coming to consensus on scoring.
  - e) We recommend more refresher-training (e.g., training video) even for experienced people, and as close to the time of making visits as is feasible. What

about small groups going through the training video and discussing it—since it is probably too hard to get the whole group together at once?

Andrew MaGowan, III

Project Administrator

Department of Research, Evaluation, and Testing

Rochester City School District
# OVERVIEW OF RECAP WORK, 1996 — 2002

Since 1996, the Rochester Early Childhood Assessment Partnership has produced over a dozen comprehensive reports. These reports have spanned a wide range of topics, but all of them have been helpful in addressing the most pressing needs of our community's youngest students, their families, their preschool providers, and our community policy-makers who shape the course of early childhood education. Prior to the initial creation of RECAP (commencing in 1992), our area policy makers were becoming increasingly concerned because, in the words of one, "... We are now spending millions of dollars on early childhood education. Many millions more will be spent in this decade. Is it 'working'? For whom? How can we most effectively, and cost-effectively, target our limited resources?" In the years since, RECAP has provided a wealth of answers to these questions and more, all intended to address these most important factors with respect to our community's early childhood education endeavors.

Among the range of topics addressed in these reports over the course of nearly seven years, they include:

 $\cdot$  A comprehensive report on the early childhood education beliefs and practices of the Rochester area parents, ranging from parents as diverse as (for example) inner-city parents receiving public assistance, to upper-middle class parents living in the Monroe County suburbs.

 $\cdot$  The first local study on the "medium-term" (about four years) effects of various preschool experiences on students' elementary school performances.

 $\cdot$  New, ground-breaking and revealing understandings about the black white test gap, and where it does and does not exist.

 $\cdot\,$  The short- to medium term effectiveness of the state-mandated kindergarten screening at the Rochester City School District, and the policy implications

 $\cdot\,$  A range of diverse longitudinal studies on children's health and development within the Rochester public schools.

 $\cdot$  Reliable, ongoing studies on the quality of prekindergarten classrooms, in settings including the Rochester City School District, Universal Pre-K, the Roman Catholic Diocese of Rochester and other private prekindergarten settings.

• The relationship between parent involvement in prekindergarten and children's achievements.

 $\cdot$  The longitudinal relationship between child prekindergarten measures and subsequent standardized test measures in the elementary grades.

 $\cdot$  The relationship between children's social-emotional intelligences and children's academic achievements, both in prekindergarten and beyond.

The strength (e.g., the reliability, validity and overall usefulness) of a wide assortment of standardized tests utilized in kindergarten through third grade (at this time), in use for program evaluation.

Throughout the creation of these documents and findings, RECAP has faithfully adhered to a singular, unifying vision: ensuring that the promise of early childhood education is fulfilled in our community.

## All RECAP Cohorts: Historical and Contemporary Overview

## **1. RECAP Today:**

The large (over 2,000 per year)* comprehensive RECAP ongoing cohorts:
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	<u>1997-98</u>	<u>1998-99</u> <u>1</u>	<u>999-00</u>	2000-01	2001-02	2002-03	2003-04
Cohort 1	<u>l<sup>*</sup></u> Pre-K	Kinder.	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
	<u>Cohort 2</u>	Pre-K	Kinder.	Grade <u>1</u>	Grade 2	Grade 3	Grade 4
		<u>Cohort 3</u>	Pre-K	Kinder.	Grade 1	Grade 2	Grade 3
			<u>Cohort 4</u>	Pre-K	Kinder.	Grade 1	Grade 2
				<u>Cohort</u>	5 Pre-K	Kinder.	Grade 1
					<u>Cohort 6</u>	Pre-K	Kinder.
					(proj	ected) Coh	ort 7 Pre-K

\*Note: Cohort 1 is the smallest of this group (N = 800; the others run at a minimum 2,000); Cohort 1 is the only group lacking ECERS data. Cohort 1 will take the State ELA-4 exam in January, 2003. Total RECAP cohorts, Fall, 2002: approximately 10,800.

Measures: (ALL: Attendance, suspensions, retentions, gifted and special education placements; health measures — Children's Health Information [CHI] at Pre-K; PACE at K – 2)

· Pre-K:	COR (pre- post), T-CRS (pre- post), P-CRS (pre-post), parent support (pre-post) ECERS, and
	parent needs, involvement, satisfaction measures;
· Kindergarten:	COR (pre- post), as of 2001-02;
· First grade:	SAT-9 (Reading Comprehension only).
· Second grade:	SAT-9
· Third grade:	SAT-9
· Fourth grade:	ELA-4 State Test Note: The SAT-9 can be configured for both national norms as well

· Fifth grade: SAT-9 well as New York ELA-4 (et al) Performance Levels [1 through 4].

#### 2. The first RECAP cohorts— three separate studies, two cohorts, within one class:

a) The Retrospective Study of Preschool Effectiveness (1997; Montes, MacGowan, Hightower and

Pryor)

- b) *The Predictive Validity of RCSD Kindergarten Screening* (1997; Montes, Hightower, Lotyczewski and MacGowan)
- c) The PACE study (focusing on tracking reliable data on children's health and development; unpublished; work completed in early 1998; Montes et al)

	<u>1991-92</u>	<u>1992-93</u>	<u>1993-94</u>	<u>1994-95</u>	<u>1995-96</u>	<u>1996-97</u>
a) Retrospective Study	Pre-K	Kinder.	Grade 1	Grade 2	Grade 3	
b) & c) <i>K Screen</i> , <i>PACE</i> :	Pre-K	Kinder.	Grade 1	Grade 2	Grade 3	Grade 4

<u>Note:</u> These cohorts were born in 1987; the original *Retrospective Study* Pre-K N = 405; by Grade 3 N = 190; the attrition rate was 52.1% over the course of five years. For the Kindergarten Screening and PACE studies, N = 1,300 (approximate) at fourth grade, which were included in this study.

# a. The first longitudinal report, The Retrospective Study of Preschool Effectiveness:

The first RECAP studies examined the "medium-term" (up to four years) of preschools in Rochester.

i) There were significant differences among the performances of students, with students who had attended Rochester Preschool Parent Program, the RCSD Early Childhood Centers and some private preschool programs: We observed a nineteen (19) percentile point advantage in both reading and math at third grade.

**ii**) "One size does not fit all": Different programs worked well for different students (and their families) at different grade levels. All groups were represented in the highest performing academic group (although there were differences in average effects

**iii**) While generally as goes mother's education so goes her child's student performance, the "effects size" of the parent component of the Rochester Preschool-Parent Program was so large as to constitute giving parents an additional nine years of education, so great were the concurrent effects on their children's school performances in the elementary grades and State tests.

iv) Math scores are transmitted through reading scores at the third grade.

v) The performances — in terms of sensitivity to preschool effectiveness — of the standardized testing, assessments, kindergarten screening, and the like, were extremely uneven. We found that the California Achievement Test (CAT) at first grade (now replaced by the Stanford Achievement Test) was a good, but not great, instrument (it seemed to capture the effects of the Rochester Preschool-Parent Program — but not the Early Childhood Centers). Neither the kindergarten screening, nor second grade Degrees of Reading Power (DRP, now replaced by the SAT-9), possessed the sensitivity to measure preschool effectiveness. The old New York State PEP test performed better than any of the K – 2 measures; in general the K – 2 measures all had problems.

b. The Predictive Validity of Kindergarten Screening at RCSD in 1992 (1997)

**i.** Problems found in the vision and hearing screening were not predictors of later school problems, because it appears they were detected and corrected early in kindergarten.

**ii.** An entering kindergartener with a problem in language, motor, and/or cognition (learning) may indeed be at risk for school failure. The more problems in any of these three areas, the greater the probability of grade retention or special education placement.

**iii.** Motor skills problems in kindergarten proved to be a more decisive factor in later school problems than the conventional wisdom held. For example, every child who had both a gross and fine motor problem at entry to kindergarten was placed in special education within three years.

**iv.** The cognition portion of the kindergarten screening was the weakest area, in terms of both predictive validity and reliability. This finding ultimately led to the replacement of the old cognitive instruments with the Child Observation Record (COR, given at all RECAP-affiliate prekindergarten classrooms).

**3.** *Telephone survey of parent's preschool choices in Monroe County*, over-sampling in Rochester

 $\cdot$  Regardless of parent income/socio-economic status, what parents desire in preschool for their children turn out to be strikingly similar (ranked first among all socioeconomic groups is child safety).

 $\cdot$  Generally speaking, parents may think they understand what constitutes a quality preschool setting — but they typically do not. Many policy-makers, including those in the field of education, often exhibit the same problems.

# Appendix A

Early Childhood Environment Rating Scale (ECERS)

## RECAP Annual Report (1999-2002) ECERS Overall Averages



## Year: 1=1999-2000 2=2000-2001 3=2001-2002

	Average Score 1999-2000	Average Score 2000-2001	Average Score 2001-2002
Area	(n=120)	(n=116)	(n=118)
Space and Furnishings	5.3	5.8	5.9
Personal Care Routines	5.6	6.2	6.0
Language and Reasoning	5.5	5.9	6.0
Activities	5.0	5.6	5.6
Interaction	6.0	6.3	6.3
Program Structure	5.4	5.8	6.1
Parents and Staff	5.7	6.1	6.5
Total	5.5	5.9	6.1





Program (n= Total Classrooms Observed)

Program G left RECAP in 2000-2001

The Numbers INSIDE the Graph are the Average ECERS Scores for Each Program

															-	
		Program														
Score Range	А	В	С	D	Е	F	Н		J	Κ	L	Μ	Ν	0	Total	Percent
1-1.9	0	0	0	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	0	0.0%
3-3.9	0	1	0	0	0	1	0	1	0	0	0	0	1	1	5	4.2%
4-4.9	1	0	0	1	0	5	1	0	1	1	0	0	2	0	12	10.2%
5-5.9	8	0	2	0	1	3	0	7	6	1	0	1	2	2	33	28.0%
6-6.9	14	7	3	1	8	4	1	11	7	1	1	1	1	1	61	51.7%
7	0	5	0	0	0	0	0	0	0	1	0	0	0	1	7	5.9%
Total	23	13	5	2	9	13	2	19	14	4	1	2	6	5	118	

**RECAP Annual Report (2001-2002)** ECERS-Personal Care Routines



Program (n= Total Classrooms Observed)

Program G left RECAP in 2000-2001

The Numbers INSIDE the Graph are the Average ECERS Scores for Each Program

	<b></b>						_								1	
							Pro	gram								
Score Range	А	В	С	D	Е	F	Н		J	Κ	L	М	Ν	0	Total	Percent
1-1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
2-2.9	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	1.7%
3-3.9	0	0	1	0	0	1	0	1	0	0	0	0	0	0	3	2.5%
4-4.9	0	2	0	1	1	1	0	1	2	0	0	1	1	0	10	8.5%
5-5.9	3	2	2	0	4	4	1	6	2	3	0	0	2	3	32	27.1%
6-6.9	11	5	1	0	2	4	1	7	3	0	1	0	3	1	39	33.1%
7	9	4	1	1	2	1	0	4	7	1	0	1	0	1	32	27.1%
Total	23	13	5	2	9	13	2	19	14	4	1	2	6	5	118	

RECAP Annual Report (2001-2002) ECERS-Language - Reasoning



Program (n= Total Classrooms Observed)

Program G left RECAP in 2000-2001

The Numbers INSIDE the Graph are the Average ECERS Scores for Each Program

		Program														
Score Range	А	В	С	D	Е	F	Н		J	Κ	L	Μ	Ν	0	Total	Percent
1-1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
2-2.9	0	0	0	0	0	2	1	0	0	0	0	0	0	0	3	2.5%
3-3.9	1	1	0	0	0	1	0	1	1	0	0	0	2	1	8	6.8%
4-4.9	0	0	0	1	0	0	1	4	2	0	0	1	0	1	10	8.5%
5-5.9	1	2	1	0	3	2	0	2	3	2	0	0	0	1	17	14.4%
6-6.9	4	5	1	0	2	5	0	6	4	0	1	0	2	1	31	26.3%
7	17	5	3	1	4	3	0	6	4	2	0	1	2	1	49	41.5%
Total	23	13	5	2	9	13	2	19	14	4	1	2	6	5	118	



#### RECAP Annual Report (2001-2002) ECERS-Activities

Program (n= Total Classrooms Observed)

Program G left RECAP in 2000-2001

The Numbers INSIDE the Graph are the Average ECERS Scores for Each Program

		Program														
Score Range	А	В	С	D	Е	F	Н		J	Κ	L	Μ	Ν	0	Total	Percent
1-1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
2-2.9	0	1	0	0	0	3	2	1	0	0	0	0	1	0	8	6.8%
3-3.9	0	0	0	0	0	2	0	0	2	2	0	0	1	1	8	6.8%
4-4.9	0	2	1	1	0	2	0	6	3	0	0	0	2	2	19	16.1%
5-5.9	1	1	0	0	2	4	0	6	4	0	0	1	2	1	22	18.6%
6-6.9	21	7	3	1	5	2	0	6	5	2	1	1	0	1	55	46.6%
7	1	2	1	0	2	0	0	0	0	0	0	0	0	0	6	5.1%
Total	23	13	5	2	9	13	2	19	14	4	1	2	6	5	118	



Program (n= Total Classrooms Observed)

Program G left RECAP in 2000-2001

The Numbers INSIDE the Graph are the Average ECERS Scores for Each Program

		Program														
Score Range	А	В	С	D	Е	F	Н		J	Κ	L	Μ	Ν	0	Total	Percent
1-1.9	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	1.7%
2-2.9	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.8%
3-3.9	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2	1.7%
4-4.9	0	1	0	0	0	2	0	1	1	0	0	0	0	2	7	5.9%
5-5.9	0	0	0	1	0	2	1	4	4	1	0	0	1	2	16	13.6%
6-6.9	5	1	2	1	5	5	0	9	2	1	0	1	2	0	34	28.8%
7	18	10	3	0	4	3	0	4	6	2	1	1	3	1	56	47.5%
Total	23	13	5	2	9	13	2	19	14	4	1	2	6	5	118	



Program (n= Total Classrooms Observed)

Program G left RECAP in 2000-2001

The Numbers INSIDE the Graph are the Average ECERS Scores for Each Program

The X is the Score for Each Classroom ==> \*\*Some Xs represent Several Classrooms with Identical Scores--see Table

															1	
							Prog	gram								
Score Range	А	В	С	D	Е	F	Н		J	Κ	L	Μ	Ν	0	Total	Percent
1-1.9	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.8%
2-2.9	0	0	0	0	0	2	2	0	0	0	0	0	0	1	5	4.2%
3-3.9	0	0	0	0	0	2	0	3	3	0	0	0	2	0	10	8.5%
4-4.9	0	2	0	0	0	1	0	1	0	1	0	0	0	0	5	4.2%
5-5.9	2	1	0	0	0	0	0	4	1	1	0	1	4	2	16	13.6%
6-6.9	2	3	0	1	3	3	0	1	4	0	1	0	0	0	18	15.3%
7	19	7	5	1	6	4	0	10	6	2	0	1	0	2	63	53.4%
Total	23	13	5	2	9	13	2	19	14	4	1	2	6	5	118	

RECAP Annual Report (2001-2002) ECERS-Program Structure



Program (n= Total Classrooms Observed)

Program G left RECAP in 2000-2001

The Numbers INSIDE the Graph are the Average ECERS Scores for Each Program

		Program														
Score Range	A	В	С	D	E	F	H		J	K	L	М	N	0	Total	Percent
1-1.9	0	0	0	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	0	0.0%
3-3.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
4-4.9	0	0	0	1	0	0	1	1	0	0	0	0	0	0	3	2.5%
5-5.9	2	1	1	0	2	3	1	3	1	1	0	0	0	1	16	13.6%
6-6.9	11	8	1	1	6	9	0	10	7	3	1	2	4	2	65	55.1%
7	10	4	3	0	1	1	0	5	6	0	0	0	2	2	34	28.8%
Total	23	13	5	2	9	13	2	19	14	4	1	2	6	5	118	





Program (n= Total Classrooms Observed)

Program G left RECAP in 2000-2001

The Numbers INSIDE the Graph are the Average ECERS Scores for Each Program

															-	
							Prog	gram								
Score Range	А	В	С	D	Е	F	Н		J	Κ	L	Μ	Ν	0	Total	Percent
1-1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%
2-2.9	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.8%
3-3.9	0	0	0	0	0	2	1	1	0	0	0	0	0	0	4	3.4%
4-4.9	0	1	0	1	0	1	1	1	1	0	0	0	1	1	8	6.8%
5-5.9	0	1	1	0	1	2	0	4	5	2	0	1	4	3	24	20.3%
6-6.9	22	8	4	1	8	7	0	13	8	2	1	1	1	1	77	65.3%
7	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4	3.4%
Total	23	13	5	2	9	13	2	19	14	4	1	2	6	5	118	

#### RECAP Annual Report (2001-2002) ECERS Overall Averages



Area

Area	Average
Space and Furnishings	5.9
Personal Care Routines	6.0
Language and Reasoning	6.0
Activities	5.6
Interaction	6.3
Program Structure	6.1
Parents and Staff	6.5
Total	6.1

The average score for all the RECAP classes was 6.1 out of 7.0, with a standard deviation of 0.9. The lowest score was 1.2 and the highest was 7.0. There were 89% classrooms at or above quality standards (score of 5.0) and 11% classrooms below quality (score of 5.0).

The average score for each of the seven areas was at or above 5.6. The area with the highest average score was "parents and staff" with a score of 6.5. Teachers received high scores on items that reflect their ability to communicate and interact with their students, and their ability to establish a friendly and supportive environment for the children in the classroom.



# RECAP Annual Report (1998-2002) ECERS-Total

School Year

School	ECERS	Number of	Average
Year	Year	Classrooms	Total
1998-1999	1	129	5.6
1999-2000	2	120	5.5
2000-2001	3	116	5.9
2001-2002	4	118	6.1





Key = ECERS Years: 1 2 3 4 Program G left RECAP in 2000-2001

									Р	rogra	m						
School	ECERS	Average															
Year	Year	Total	n	А	В	С	D	Е	F	Н	I	J	Κ	L	Μ	Ν	0
1998-1999	1	5.6	129	5.7	5.5	6.2	6.3	5.9	4.7		5.5	6.0	5.5		4.9	5.8	
1999-2000	2	5.5	120	5.9	6.3	5.9	6.2	5.8	5.0	4.1	5.4	6.4	5.0	4.5	6.0	4.4	
2000-2001	3	5.9	116	6.3	6.7	6.4	6.4	6.1	5.5	3.6	5.6	6.3	5.7	5.5	6.8	5.2	
2001-2002	4	6.1	118	6.6	6.3	6.4	5.9	6.4	5.3	3.9	5.9	6.1	6	6.6	6.2	5.6	5.6

Appendix B

Early Childhood Parent Survey (ECPS / Satisfaction)

RECAP Annual Report (2001-2002) Early Childhood Parent Survey (ECPS / Satisfaction) Overall Program Grades - Inclusive of all Programs n=840



Grade

**RECAP Annual Report (2001-2002)** 

Early Childhood Parent Survey (ECPS / Satisfaction) Grades for Parent's Needs, Communication and Involvement n=854



Item	Parent's Needs and Involvement	*Yes	*No	**Missing
1.	Are parents greeted warmly at arrival and departure?	99.0%	1.0%	1.2%
2.	Is information shared with you about your child at least weekly?	92.7%	7.3%	1.9%
3.	Are there enough parent-teacher conferences?	87.6%	12.4%	5.1%
4.	Do teachers give you enough feedback about your child?	92.9%	7.1%	1.9%
5.	Does your child do things with you at home that her/she has learned at school?	96.7%	3.3%	0.9%
6.	Are parents encouraged to become involved with program activities?	97.0%	3.0%	1.7%
7.	Are parents asked to be part of the program many times during the year?	94.2%	5.8%	2.6%
8.	Are parents' views considered when the program makes decisions?	90.1%	9.9%	6.6%
9.	Are parents actively involved in making program decisions?	81.3%	18.7%	9.8%
10.	Do parents have someone or a group they can talk with about their own problems?	88.2%	11.8%	9.4%
11.	Do parents receive enough help from program staff?	95.5%	4.5%	5.6%
12.	Are parents asked to help evaluate the program each year?	89.4%	10.6%	10.8%

**RECAP Annual Report (2001-2002)** 

Early Childhood Parent Survey (ECPS / Satisfaction) Grades for Children's Needs and Involvement n=854



Item	Children's Needs and Involvement	*Yes	*No	**Missing
1.	Does your child usually like to go to school?	98.1%	1.9%	0.8%
2.	Is your child feel safe at school?	99.4%	0.6%	1.3%
3.	Does your child get a healthy snack at school?	98.7%	1.3%	1.6%
4.	Do children in this class learn proper ways to take care of themselves, such as wash hands, eat, brush teeth, etc.?	99.1%	0.9%	2.0%
5.	Is your child busy and involved in the classroom every day?	98.9%	1.1%	2.1%
6.	Is your child learning how to get along with other children?	99.7%	0.3%	1.5%
7.	Does your child talk about playing with others?	96.7%	3.3%	0.8%
8.	Are children encouraged to share their thoughts and feelings with others?	97.9%	2.1%	4.6%
9.	Does your child bring home books for you to read to him/her?	52.2%	47.8%	2.4%
10.	Does your child have a cubby or mailbox to keep his/her belongings and work?	98.5%	1.5%	1.9%

**RECAP Annual Report (2001-2002)** 

Early Childhood Parent Survey (ECPS / Satisfaction) Grades for Learning Environment n=845



Grad	е
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Item	Learning Environment	*Yes	*No	**Missing
1.	Does the classroom have many books that children can use every day?	99.4%	0.6%	3.6%
	Does the classroom have enough learning materials including puzzles,			
2.	blocks, scissors, musical instruments, sand/water table, easel or art table,	99.3%	0.7%	1.6%
	dress-up clothes, etc.?			
3.	Are there at least five(3) "learning centers" that children can use everyday?	97.7%	2.3%	7.1%
4.	Do children have a chance to use a computer weekly?	75.7%	24.3%	10.5%
5.	Can children reach most of the things in the classroom themselves?	98.4%	1.6%	2.7%
6.	Is children's art displayed on the walls at children's eye level?	97.1%	2.9%	3.4%
7.	Are most of the classroom's walls covered with work done by children?	96.0%	4.0%	4.3%
8.	Are many things in the classroom labeled?	97.3%	2.7%	4.8%
9	Is the classroom set up so quiet areas are next to quiet areas, like reading	97.5%	2.5%	8.6%
0.	next to puzzles, not like reading next to blocks?	01.070	2.070	0.070
10.	Do teachers read to the children many times every day?	96.7%	3.3%	7.0%
11.	Can children choose what they want to do?	97.0%	3.0%	7.1%
12.	Are many activities done in small groups of children daily?	98.3%	1.7%	7.1%
13.	Do children have many chances to change groups every day?	96.5%	3.5%	10.7%
14.	Is there enough space for motor activites like running, climbing, throwing balls, dancing, etc.?	100.0%		14.5%

**RECAP Annual Report (2001-2002)** 

Early Childhood Parent Survey (ECPS / Satisfaction) Grades for Teachers n=846



Item	Teachers	*Yes	*No	**Missing
1.	Does a teacher greet your child when he/she arrives at the classroom?	99.5%	0.5%	2.5%
2.	Do teachers listen carefully to children in the class?	99.5%	0.5%	3.6%
3.	Does the teacher constantly tell the children what to do?	59.0%	41.0%	11.2%
4.	Do teachers talk individually with your child, many times a day?	91.3%	8.7%	11.8%
5.	Is your child's teacher friendly?	99.4%	0.6%	1.5%
6.	Are teachers polite and respectful of children and parents?	99.4%	0.6%	1.7%
7.	Does your child's teacher usually ask short "yes/no" type of questions?	74.8%	25.2%	11.2%
8.	Are children usually asked questons that need long. More complex answers?	54.8%	45.2%	15.8%
9.	Do teachers help children talk through problems and think of solutions?	98.2%	1.8%	6.8%
10.	Do teachers consistently use the same rules with all children?	96.6%	3.4%	6.4%
11.	Does the program have a daily routine?	99.2%	0.8%	3.0%
12.	Are parents kept informed about classroom activities?	96.3%	3.7%	2.9%
13.	Does someone talk with you when your child is having a problem?	97.3%	2.7%	3.9%
14.	Does someone talk with you when your child is doing well?	94.9%	5.1%	3.5%
15.	Do you feel comfortable talking with your child's teacher?	99.1%	0.9%	2.2%

RECAP Annual Report (2001-2002) Early Childhood Parent Survey (ECPS / Satisfaction) Grades for Administration n=839



Item	Administration	*Yes	*No	**Missing
1.	Do you know the center's administrator or director?	84.8%	15.2%	3.1%
2.	Are you treated with respect by the center's administration?	97.6%	2.4%	8.0%
3.	Does the administrator support parent participation in the classroom?	95.9%	4.1%	9.0%
4.	Does the administrator respond to the needs of the parents?	96.9%	3.1%	10.0%
5.	Are you satisfied with the support you receive from administration?	95.7%	4.3%	9.3%
6.	Is there enough indoor space so children and adults can move from place to place easilly?	94.6%	5.4%	3.7%
7.	Is there enough outdoor space that allows for different types of activities to happen at the same time?	93.3%	6.7%	5.6%
8.	Does the program meet families needs?	98.3%	1.7%	5.4%
9.	Are there enough teachers to meet your child's needs?	98.0%	2.0%	3.4%
10.	Is the center sensitive to you and your culture?	97.3%	2.7%	5.8%

**RECAP Annual Report (2001-2002)** 

Early Childhood Parent Survey (ECPS / Satisfaction) Grades for Building, Room, and Equipment n=861



Item	Building, Room, and Equipment	*Yes	*No	**Missing
1.	Are the building and grounds clean?	98.1%	1.9%	0.8%
2.	Are floors and walls in good repair?	98.6%	1.4%	0.8%
3.	At the start of the day is the classroom clean?	99.8%	0.2%	1.2%
4.	Are toilets and sinks clean?	98.4%	1.6%	3.1%
5.	Is the kitchen area clean?	99.4%	0.6%	11.3%
6.	Is there good ventilation and enough natural light in the classroom?	97.1%	2.9%	1.6%
7.	Is there enough child-sized furniture for children?	99.2%	0.8%	1.6%
8.	Is there enough adult-sized furniture for parent meetings or parent groups?	87.5%	12.5%	6.6%



\* Programs D, H, L and M each had less than 17 responses Program G left RECAP in 2000-2001

# RECAP Annual Report (2001-2002)









\* Programs D, H, L and M each had less than 17 responses Program G left RECAP in 2000-2001

## **RECAP Annual Report (2001-2002)** Early Childhood Parent Survey (ECPS / Satisfaction)



Average Grade for Learning Environment by Program

## **RECAP Annual Report (2001-2002)** Early Childhood Parent Survey (ECPS / Satisfaction)



Average Grade for Learning Environment by Program

RECAP Annual Report (2001-2002) Early Childhood Parent Survey (ECPS / Satisfaction)



Average Grade for Administration by Program



Early Childhood Parent Survey (ECPS / Satisfaction)

**RECAP Annual Report (2001-2002)** 

\* Programs D, H, L and M each had less than 17 responses Program G left RECAP in 2000-2001



**RECAP Annual Report (1999-2002)** Early Childhood Parent Survey (ECPS / Satisfaction) Percent of Grades greater than B for the Overall Program by Program

1 = 1999-2000 2 = 2000-2001 3 = 2001-2002 Program G left RECAP in 2000-2001

	Perce	ent of Overall F	Program Sat	isfaction Grade	s greater t	han B
	1999	9-2000	2000	)-2001	2001	-2002
Program	n	Percent	n	Percent	n	Percent
A	207	93%	157	95%	188	95%
В	45	85%	87	92%	83	94%
С	26	90%	34	89%	35	90%
D	24	96%	17	89%	7	100%
E	128	96%	124	94%	113	97%
F	100	93%	77	95%	58	97%
Н	42	81%	14	93%	7	70%
I	100	88%	126	93%	84	86%
J	52	96%	75	95%	116	94%
К			18	95%	20	80%
L	33	85%	21	84%	16	100%
М	23	96%	10	91%	2	50%
Ν	9	100%	24	92%	23	96%
0					28	88%

Percent of Overall Program Satisfaction					
Grade	1999-2000	2000-2001	2001-2002		
A or A-	79%	79%	79%		
B or B+	18%	18%	17%		
Below B	3%	3%	4%		





1 = 1999-2000 2 = 2000-2001 3 = 2001-2002

	Percent of Grades greater than B		
Area	1999-2000	2000-2001	2001-2002
Parents Needs, Communication and Involvement	86%	84%	88%
Children's Needs and Involvement	89%	91%	93%
Learning Environment	92%	95%	92%
Teachers	91%	94%	92%
Administration	85%	87%	88%
Building, Room, and Equipment	89%	90%	91%
Overall	91%	94%	93%

# Appendix C

Universal Prekindergarten ECERS





Solid bar = RCSD Classrooms X bar = Non-RCSD Classrooms

Note: Number of Classrooms: RCSD = 23 (41%) Non-RCSD = 33 (59%)
#### Score Ranges with Descriptive Statistics on ECERS for UPK

				Sc	core Ran	ge				
										Standard
	·	1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6.0-6.9	7.0	Average	Deviation
Space	RCSD	0	0	1	1	6	15	0	6.1	0.78
and	Non-RCSD	0	0	1	4	12	15	1	5.8	0.76
Furnishings	Total	0	0	2	5	18	30	1	6.0	0.77
-	Percent	0%	0%	4%	9%	32%	54%	2%		
Personal	RCSD	0	0	1	3	4	8	7	6.1	1.04
Coro	Non-RCSD	0	0	0	1	12	10	10	6.2	0.76
Doutines	Total	0	0	1	4	16	18	17	6.1	0.88
Routines	Percent	0%	0%	2%	7%	29%	32%	30%		
	RCSD	0	0	1	2	2	5	13	6.4	0.99
Language-	Non-RCSD	0	0	4	4	7	7	11	5.8	1.24
Reasoning	Total	0	0	5	6	9	12	24	6.0	1.17
	Percent	0%	0%	9%	11%	16%	21%	43%		
	RCSD	0	0	1	5	4	11	2	5.8	1.02
A otivition	Non-RCSD	0	0	5	9	6	11	2	5.5	1.13
Activities	Total	0	0	6	14	10	22	4	5.6	1.09
	Percent	0%	0%	11%	25%	18%	39%	7%		
	RCSD	0	0	0	0	2	7	14	6.7	0.53
Interaction	Non-RCSD	0	0	1	3	9	11	9	6.1	0.91
Interaction	Total	0	0	1	3	11	18	23	6.3	0.83
	Percent	0%	0%	2%	5%	20%	32%	41%		
	RCSD	0	0	1	0	5	2	15	6.4	1.02
Program	Non-RCSD	0	1	4	2	7	7	12	5.9	1.34
Structure	Total	0	1	5	2	12	9	27	6.1	1.24
	Percent	0%	2%	9%	4%	21%	16%	48%		
Deronto	RCSD	0	0	0	1	1	9	12	6.7	0.57
Parents	Non-RCSD	0	0	0	0	6	21	6	6.4	0.56
ana	Total	0	0	0	1	7	30	18	6.5	0.58
Stati	Percent	0%	0%	0%	2%	13%	54%	32%		
	RCSD	0	0	0	1	5	16	1	6.3	0.59
<b>T</b> _(_)	Non-RCSD	0	0	0	3	11	19	0	5.9	0.73
lotai	Total	0	0	0	4	16	35	1	6.1	0.70
	Percent	0%	0%	0%	7%	29%	63%	2%		

Note: Number of Classrooms: RCSD = 23 (41%) Non-RCSD = 33 (59%)

ECERS "Ranked" by Overall Averages for UPK



**RCSD Classrooms** 

Non-RCSD Classrooms



#### **ECERS Overall Averages for UPK**



**RCSD Classrooms** 

Appendix D

Universal Prekindergarten ECPS / Satisfaction



Figure 1: Mean Scores for the Early Childhood Parent Survey for UPK Classrooms

Table 1	Table 1: Mean Scores for the Early Childhood Parent Survey for UPK Classrooms											
						Building,						
	Parent	Children	Learning			Room and						
	Needs	Needs	Environment	Teachers	Administration	Equipment	Overall					
2001-2002 RCS	D 10.0	10.3	10.3	10.4	10.2	10.3	10.3					
2001-2002 Non-	RCSD 9.7	10.1	10.1	10.0	9.9	10.1	10.1					

Score Code: F = 1.0 to 1.9 D = 2.0 to 2.9 D+ = 3.0 to 3.9 C- = 4.0 to 4.9 C = 5.0 to 5.9 C+ = 6.0 to 6.9 B- = 7.0 to 7.9 B = 8.0 to 8.9 B+ = 9.0 to 9.9 A- = 10.0 to 10.9 A = 11.0

Figure 2: Percent by Grades on Overall Program of UPK Classrooms on the Early Childhood Parent Survey



Table 2: Percent by Grades on Overall Program of UPK Classrooms on the Early Childhood Parent Survey

	F	D	D+	C-	С	C+	B-	В	B+	A-	А
RCSD						1.3%	1.3%	1.9%	13.5%	23.7%	58.3%
Non-RCSD	0.4%			0.4%	1.3%	2.1%	2.1%	3.8%	12.4%	19.7%	57.7%

Figure 3: Percent by Grades on Parent Needs, Communication and Involvement of UPK Classrooms on the Early Childhood Parent Survey



Percent

Table3: Percent by Grades on Parents Needs, Communication and Involvement of UPK Classrooms on the Early Childhood Parent Survey

	F	D	D+	C-	С	C+	B-	В	B+	A-	А
RCSD					0.6%	3.1%	3.7%	4.3%	19.0%	19.0%	50.3%
Non-RCSD	0.4%		0.4%	0.8%	2.5%	4.6%	1.7%	5.1%	21.5%	17.3%	45.6%

Figure 4: Percent by Grades on Children's Needs and Involvement of UPK Classrooms on the Early Childhood Parent Survey



Figure 4: Percent by Grades on Children's Needs and Involvement of UPK Classrooms on the Early Childhood Parent Survey

	F	D	D+	C-	С	C+	B-	В	B+	A-	А
RCSD	•		•	0.6%	0.6%	1.3%	0.6%	1.9%	13.8%	20.1%	61.0%
Non-RCSD	•	0.4%			0.4%	3.0%	3.0%	3.8%	14.4%	19.9%	55.1%

Figure 5: Percent by Grades on Teachers of UPK Classrooms on the Early Childhood Parent Survey



Figure 5: Percent by Grades on Teachers of UPK Classrooms on the Early Childhood Parent Survey

	F	D	D+	C-	С	C+	B-	В	B+	A-	А
RCSD					0.6%	1.9%	1.9%	•	13.7%	14.3%	67.7%
Non-RCSD		0.4%	0.4%		0.9%	3.0%	2.6%	4.3%	17.6%	16.3%	54.5%

Figure 6: Percent by Grades on Administation of UPK Classrooms on the Early Childhood Parent Survey



Table 6: Percent by Grades on Administation of UPK Classrooms on the Early Childhood Parent Survey

								) • • • • • • •			
	F	D	D+	C-	С	C+	B-	В	B+	A-	А
RCSD		0.6%		0.6%		1.3%	1.9%	3.2%	12.9%	18.1%	61.3%
Non-RCSD		0.4%	0.4%	0.9%	1.7%	1.7%	3.0%	3.8%	17.9%	15.4%	54.7%

Figure 7: Percent by Grades on Building, Room and Equipment of UPK Classrooms on the Early Childhood Parent Survey



Table 7: Percent by Grades on Building, Room and Equipment of UPK Classrooms on the Early Childhood Parent S	Survey
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	F	D	D+	C-	С	C+	B-	В	B+	A-	А
RCSD			•			3.7%	1.9%	1.9%	14.8%	11.7%	66.0%
Non-RCSD					1.3%	2.1%	2.5%	4.6%	15.2%	16.0%	58.2%

Figure 8: Percent by Grades on Learning Environment of UPK Classrooms on the Early Childhood Parent Survey



Percent

Table 8: Percent by Grades on Learning Environment of UPK Classrooms on the Early Childhood Parent Survey

	F	D	D+	C-	С	C+	B-	В	B+	A-	А
RCSD				•	0.6%	1.9%	1.3%	2.5%	13.4%	19.1%	61.1%
Non-RCSD			0.4%			1.3%	1.7%	6.8%	16.7%	20.5%	52.6%

### Abstract

Generalization of the Child Observation Record: A Validity Study of Diverse Samples of Urban, Low-income Preschool Children

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# Generalization of the Child Observation Record: a validity study for diverse samples of urban, low-income preschool children

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#### Abstract

The present investigation addressed the construct validity of the Child Observation Record (COR) with low-income urban preschool children. From two separate samples representing low-income preschool children, COR ratings were analyzed using multivariate techniques. Independent analyses from these two urban sites yielded a three-dimensional structure: Cognitive Skills, Social Engagement, and Coordinated Movement. Further analyses cross-validated this structure for males and females and across ethnic groups. Concurrent assessments provided convergent and discriminant validity for the Social Engagement dimension and convergent validity for Cognitive Skills dimension. Analyses of item distributions of the 5-point developmental sequences represented by the 30 COR items were used to examine the assumption that all the distributions were continuous unimodal distributions. Findings did not universally support this assumption revealing some irregular distributions with troughs in the mid-range of continua. Implications of the findings for early childhood assessment of vulnerable children and future research were discussed. © 2002 Published by Elsevier Science Inc.

Keywords: Child Observation Record; Preschool children; Childhood assessment

#### Abstract

Quality Child Care and Socio-Emotional Risk Factors: No Evidence of Diminishing Returns for Urban Children

# QUALITY CHILD CARE AND SOCIO-EMOTIONAL RISK FACTORS: NO EVIDENCE OF DIMINISHING RETURNS FOR URBAN CHILDREN

May, 2002

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#### ABSTRACT

The purpose of this study was to test the hypothesis that quality improvements in early childhood centers experience diminishing returns to scale (smaller benefits to children as quality increases) with regards to concurrent socio-emotional outcomes. This hypothesis lies at the core of Scarr's (1998) argument that public policy should concentrate on improving low quality settings rather than improving settings that already have acceptable quality. The study detected sizeable effect sizes linking process quality in the good to excellent range with reduction of existing socio-emotional risk factors (d=0.51) and prevention of the emergence of new socio-emotional risk factors (d=-0.41). These effect sizes are substantially larger than those reported by other studies investigating quality environments in the poor to good quality range (Peisner-Feinberg, and Burchinal, 1995, d=0.16), and larger than Durlak and Wells' (1997) meta-analytic effect size for universal preventive interventions (d=0.35). Therefore, the hypothesis that as quality increases the benefits for children increase but at a diminishing was rejected for concurrent socio-emotional outcomes in urban populations.