Fragile Lives, Shattered Dreams: A Report on Implementation of Preschool Education in New Jersey's *Abbott* Districts

W. Steven Barnett, Ph.D.
Julie E. Tarr, Ed.D.
Cindy Esposito Lamy, M.A.
Ellen C. Frede, Ph.D.

Center for Early Education Research
Rutgers-The State University of New Jersey

In January 2002, the Center for Early Education Research was merged with the National Institute for Early Education Research.

National Institute for Early Education Research
120 Albany Street, Suite 500
New Brunswick, NJ 08901
(732) 932-4350 Ext. 225

Financial support for the work reported here was provided by the Schumann Fund for New Jersey, Geraldine R. Dodge Foundation, Fund for New Jersey, Prudential Foundation, Carnegie Corporation of New York, David and Lucile Packard Foundation, U.S. Department of Education, and school districts participating in the Abbott Early Education Consortium.

Fragile Lives, Shattered Dreams: A Report on Implementation of Preschool Education in New Jersey's *Abbott* Districts

I. Introduction

On May 21, 1998, New Jersey's Supreme Court mandated that children in New Jersey's Abbott districts (the 30 highest poverty districts in the state) receive a high-quality preschool education beginning at age 3. The goal of this preschool program is to prepare these children to enter kindergarten with skills and abilities comparable to those of their wealthier suburban peers. The Court's mandate has a strong scientific basis. High rates of school failure for lower income urban children occur despite the fact that they learn just as much as other children when they enter school. Many simply start out so far behind that they never catch up with the expectations of the school (Entwisle, Alexander, & Olson, 2000). However, research has found that intensive, high-quality preschool programs can close much of the early ability gap for lower income children (Barnett, 1998). This substantially increases their educational success and produces a host of additional long-term benefits including increased employment and earnings, and decreased crime and delinquency (Barnett, 1998; Reynolds, et al., 2001).

The Court-ordered preschool program presents an extraordinary opportunity to improve education for New Jersey's most disadvantaged children. One-quarter of the state's children live in the Abbott districts, and closing the achievement gap between cities and suburbs would simultaneously help these children and provide an economic boost to the entire state. Economic analysis has shown high-quality preschool education to return later savings to the taxpayers that far exceed its costs (Barnett, 1993). Thus, the Abbott preschool program offers important gains to all of the state's citizens. However, these benefits will only be reaped if intensive, high-quality preschool programs are actually provided to children in the Abbott districts. Unfortunately, this report finds that the state has made little progress toward this goal despite its promises to fully implement the Court order as early as Fall, 1999. Major changes in state policy will be required to implement the Court mandate within the next several years. Recommendations for these changes are provided at the end of the report.

II. Background

The Supreme Court has repeatedly emphasized that the state and the districts are to develop preschool programs based on assessments of the particular needs of children. The Court set out only a few basic standards for quality preschool education:

(1) A certified teacher and an assistant for each class;
(2) Maximum class size of 15 students.
(3) Developmentally appropriate curriculum;
(4) Adequate facilities; and,
(5) Transportation, health and other related services as needed.

The Court did not mandate more than a half-day school-year program, because of concerns that the schools might be overburdened given their other urgent responsibilities including whole school reform. The Court also permitted services to be provided through public

school, Head Start or community child care programs recognizing the value of each of these sectors and the challenges of rapidly moving to serve all children. School districts were given the primary responsibility of ensuring that preschool programs met the Court's standards and provided a high-quality education regardless of program auspice. More recently, the Whitman administration added the additional requirement that all programs offer preschool services up to 10 hours per day 250 days per year.

In Fall of 1998, the Center for Early Education Research at Rutgers (CEER) began to work with the Abbott districts to conduct comprehensive needs assessments. The Needs Assessments provided information on the needs of children in each district and on the capabilities of district operated, Head Start, and community-based preschool providers who are potential partners in serving these children. The Needs Assessments also provided information on where children and programs began that can be used to evaluate progress. This information was made available to districts so that they could use it to develop programs that address the needs of children and make maximum use of the existing preschool education resources. Most of the Abbott districts followed this approach to develop plans and funding requests for 1999-2000. The Commissioner of Education rejected these plans with a form letter.

In May of 1999, CEER issued a report summarizing the results of the Needs Assessment regarding children's needs, existing capacity, and the resources required by district and community programs to meet children's needs. CEER's 1999 report found that both the quantity and quality of preschool programs in the Abbott districts must be substantially increased to meet children's needs. Immediate and extraordinary action by the state was required if the Court order was to be adequately implemented. Specific recommendations in the report included:

- The state must require programs to meet the Court's standards for the quality, intensity, and ranges of services required for intensive, high-quality preschool education ***and*** provide sufficient funding and other support so that the standards can be met.
- The state should move quickly to fund facilities and streamline the process for approval of construction and renovation.
- The state should provide districts with funds to evaluate program quality and effectiveness.
- The state should provide funds for full-day, extended-day, and summer programs as soon as possible.
- The state should create an early childhood teacher certification, new professional development programs to prepare new teachers, and new programs to enable existing staff to improve their qualifications.

Unfortunately, the state did not implement CEER's recommendations. The state's failure to act was recognized on March 7, 2000 when the Supreme Court ruled in Abbott VI that high quality programs were not being provided in the Abbott districts and directed the state to take corrective action. The Court reiterated the basic requirements for a high-quality program and the importance of developing programs based on district assessments of children's needs. The Court also set deadlines for compliance. Unlicensed teachers with BA degrees already in Abbott preschool classrooms were given until September 2001 to obtain an early childhood teaching certificate. Teachers without even a Bachelor's degree were given until September

2004 to complete a BA and a teaching certificate. Newly hired teachers were required to have a teaching certificate. The Court expected that its ruling would clear up any misunderstandings by reiterating the basic requirements listed on page one above, setting deadlines, re-emphasizing the need for districts to develop programs based on assessments of children's needs.

This report provides an update on the needs of children in the Abbott districts and an assessment of progress toward implementation of high-quality preschool programs in the Abbott districts in 1999-2000 and 2000-01. Findings in this report are based on the complete 1999-2000 Needs Assessment, enrollment figures through December 2000, projections in the district's 2000-01 plans, and partial data from the on-going 2000-01 Needs Assessment. The remaining sections of this report are as follows: school readiness and children's needs, enrollment, program quality, and overall conclusions and recommendations for the future.

III. School Readiness and Preschool Children's Needs

All children are ready to learn at every age, but many children from low-income families begin school with lesser abilities than more advantaged children who have greater access to educational resources prior to school entry. Even though disadvantaged children learn just as much in the first years of school as others, they start school so far behind that many are soon branded failures (Entwisle, Alexander, & Olson, 2000). These children who get failing grades and are held back in the early grades of school tend to fall further behind and dropout of school as the years pass. Thus, many lower income children, especially those in high poverty urban neighborhoods, are ready to learn, but they are not ready to succeed in school. One goal of the CEER needs assessments has been to find out how far children in the Abbott districts are behind in the abilities required for school success. This information provides one basis for judging what more they need to help prepare them to succeed in school.

In 1998-99, CEER assessed the abilities by of 2,156 kindergarten children in 22 Abbott districts through teacher ratings and a direct assessment. Teachers completed the Academic and Communication scales of the Developmental Profile II (DPII; Alpern, Boll, & Shearer, 1994) on children in their kindergarten classes. District and CEER staff administered the Early Screening Inventory (ESI; Meisels, 1997) to children. Scores on the DPII indicated that children in the Abbott districts began school 6 to 18 months behind their peers elsewhere. ESI results also indicated that many children had not developed the abilities needed for success in school. Children with Limited English Proficiency (LEP) tended to be even further behind. Complete information on last year's results is available in a report by Barnett, Tarr, and Frede (1999).

In 1999-2000, CEER assessed the abilities of 1,701 kindergarten children in 15 Abbott districts using the recently revised Peabody Picture Vocabulary Test (PPVT-III; Dunn & Dunn, 1997) and it's Spanish Language counterpart, the Test de Vocabulario en Imagenes Peabody (TVIP, Dunn, Padilla, Lugo & Dunn, 1986). The PPVT-III is a nationally standardized test of receptive vocabulary. It is often used as a general indicator of children's cognitive abilities and likely school success. CEER personnel were trained to administer the PPVT-III and TVIP, and they individually tested children at school. Spanish-speaking kindergarten children who were classified by the schools as limited English proficient (LEP) were tested in Spanish with the TVIP.

The 1999-2000 results were similar to those of the previous year. The average standard score on the PPVT-III for non-LEP children was 88 (compared to an expected average of 100). This places the average child in the Abbott districts who is not classified as LEP at the 20th percentile nationally. Over 40% of these children scored 1 standard deviation below the mean (that is, outside the normal range) and 13% scored two standard deviations below the mean (far outside the normal range). TVIP standard scores for LEP children were slightly lower, with a mean of 83, placing them at the 14th percentile nationally. Over half the LEP classified children fell more than 1 standard deviation below the mean and 27% more than two standard deviations below the mean.

Parents also provided information about needs and barriers to participation. In 1999-00 we conducted a survey of parents in Newark, as Newark did not participate in CEER's 1998-99 survey of families of 3- and 4-year-olds. The 1999-00 survey was conducted by canvassing neighborhoods rather than by telephone because of concerns that telephone interviews might under-represent the most disadvantaged families. This concern was warranted. The Newark sample includes a higher percentage of lower income and less educated families and so provides a closer match to census data than did last year's Abbott sample. Complete results are presented in a separate report, but key findings are summarized below (Tarr & Barnett, 2001).

Results from the Newark survey are consistent with those obtained for other districts in 1998-99. In particular, most parents thought that full-day programs that also provided services during the summer were educationally important and many parents noted logistical or other problems that would limit their children's participating in half-day programs. Nearly 90% of the parents of 3- and 4-year-olds reported that they thought their child would educationally benefit from a full-day program, and 77% reported that a summer program would help their child learn and prepare for kindergarten.

In Newark, as elsewhere, program design and lack of transportation presented barriers to program participation. Over 40% said that their child could not attend a half-day preschool program, at the same time that nearly 50% reported that adequate child care was very difficult or impossible to find. One in four parents said they could not get their child to a half-day program unless transportation was provided. Many parents who were willing to send their child to a half-day program indicated they would enroll their child only in the morning (23%). Nearly half reported that their child would need another child care situation for the afternoon, and 72% said that their 3- or 4-year old naps in the afternoon. One of the most interesting findings is that 60% of the parents did not even know their child was entitled to a free preschool program.

IV. Enrollment in Preschool Education

A key measure of state progress towards implementing the Court mandate to provide preschool education to all children in the Abbott districts is enrollment. Our survey of the parents of public school kindergarten children in 1999-2000 provides data on enrollment prior to implementation of the court order (1998-99 at age 4 and 1997-98 at age 3). We also obtained data from the New Jersey Department of Education on enrollment from 1994-95 to 2000-01. In addition, we conducted our own survey of district enrollment in December 2000 as there are inconsistencies and gaps in the data collected and reported by the state. Finally, we calculated

the eligible population using New Jersey Department of Education data on public school enrollment and U.S. Department of Education data on private school enrollment. Many districts are far from full enrollment in "Abbott" preschool programs, and there has been only a small increase in the number of children attending a preschool program of some kind.

Table 1 compares state figures for 1999-2000 enrollment with CEER parent survey results on enrollment by type of preschool program for children who attended public school kindergarten. CEER survey data differ from state data in several respects. First, CEER data provide estimates from a sample, while state data provide a complete count. Second, CEER data do not distinguish between regular and "preschool disabled" program enrollment. The state reports these separately and the two categories should be summed for comparison to the CEER results. As kindergarten children in special classes for children with disabilities were not included in the CEER survey, the CEER estimates probably slightly underestimate participation in district-sponsored programs. Third, CEER estimates of total enrollment include data from a small number of respondents who could not clearly identify the program's sponsor. Fourth, state data do not include children served by private providers who did not contract with districts. The number attending noncontracted centers is likely to be small.

Table 1 shows little change in enrollment and a remarkable degree of consistency between CEER survey results and state report regarding the distribution of children across programs. The data indicate little progress toward increased enrollment of children in any type of program through the 1999-2000 school year. However, both the CEER and the state estimates in Table 1 essentially assume that public school kindergarten enrollment provides an estimate of the eligible population. This is incorrect because some children in the Abbott districts do not enter the public schools until first grade, and some children never enter the public schools. Thus, these figures are upper-bounds. For example, if children who do not attend kindergarten (11%) also do not attend preschool, the total percentage attending preschool programs is lower than indicated in Table 1. However, the figures in Table 1 still provide a good estimate of the amount of progress that has been made in increasing the eligible population served.

Table 1. Enrollment in All Types of Preschool Programs as a Percentage of Public Kindergarten Enrollment by Type of Program and Child's Age, 1997-98 to 1999-00

Type of Preschool	CEER 4's 1998-99	State's 4's 1999-00	CEER 3's 1997-98	State's 3's 1999-00
District/Disabil.		5%		3%
District	30%	24%	5%	4%
Community	25%	25%	24%	26%
Head Start	22%	23%	11%	11%
Total Served	78%*	77%	42%*	44%

* Includes children for whom type of program was not reported by survey respondent.

Table 2 presents estimates of the percentage of the total eligible population served in *Abbott funded* preschool programs in 2000-01 and projections based on district plans for 2001-02. The total eligible population was calculated based on first grade enrollment in public and private schools in the Abbott districts. The comparable enrollment figure at the end of the 1999-2000 school year was 19,179. This indicates that the percentage of children served in Abbott programs increased by 6% (33% to 39%) last year. Projections based on the district plans submitted to the state indicate that enrollment would rise by 20% to 59% in 2001-02 if the plans were fully implemented. However, it is highly unlikely that the planned increases will take place. Last year's plans projected a much higher enrollment than was actually attained, and this year's plans would require doubling Early Childhood Program Aid to the districts for operating expenses and substantial additions to facilities.

Total enrollment in any type of program is somewhat higher than Abbott program enrollment because the total includes enrollments in preschool special education programs and Head Start that do not receive Abbott funds. Calculating total enrollment is difficult because it is not clear that districts are completely consistent in their reporting. This seems to be most problematic with respect to whether the Abbott program count includes children in preschool special education classes and children with special needs who are mainstreamed in "regular" Abbott program classes. Inconsistent reporting could lead to some double counting in our "Total enrollment" figures. Our best estimate is that the percentage of children attending some type of preschool program in the Abbott districts at ages 3 and 4 was 50% in 1999-00 and 56% in 2000-01. These figures may underestimate participation to the extent that there are children who attend private preschool programs that do not receive Abbott funds. The estimates suggest that children who do not attend kindergarten do not attend Abbott preschool programs. However, despite uncertainty about the levels of attendance, the figures provide a reasonable estimate of progress toward increasing enrollment. Finally, the projections in the 2001-02 plans would raise attendance to 76% (including Head Start), but there is no assurance that this projected increase is attainable if the plans are funded at the requested level and no indication that the state will provide the funding requested.

The fundamental reason that enrollment has not expanded more is that the state has refused to provide the resources needed for greater expansion. The facilities and funding made available were not even sufficient to serve the number of children projected in the 2000-01 plans. Early Childhood Program Aid (ECPA) remains basically unchanged since the Court order (limited to the original funding formula's predetermined adjustments). Increased funding from the Department of Human Services provided more dollars per child to private programs with which Abbott districts contracted for preschool programs. The state made no effort to ensure that enrollment increases projected in the district preschool plans could actually be achieved based on the plans or that adequate facilities and funding levels were requested and granted. Last year, actual enrollment fell substantially below the levels projected in approved plans, but to our knowledge the state has not held anyone accountable for failure to achieve the projected levels of enrollment.

Table 2. Abbott District eligible population and "Abbott Program" enrollment.

DISTRICT	1st Grade Total	Est. Total Eligible	99-00 Pre-K	%Served 99-00	00-01 Pre-K	%Served 00-01	Projected 01-02	Projected %Served 01-02
ASBURY PARK	369	738	227	31%	302	41%	441	60%
BRIDGETON	387	774	304	39%	309	40%	450	58%
BURLINGTON	227	454	122	27%	124	27%	182	40%
CAMDEN	1781	3562	1312	37%	1598	45%	1985	56%
ORANGE	473	946	560	59%	560	59%	785	83%
EAST ORANGE	1221	2442	707	29%	684	28%	1282	52%
ELIZABETH	1993	3986	907	23%	835	21%	3653	92%
GARFIELD	382	764	301	39%	369	48%	460	60%
GLOUCESTER	182	364	155	43%	173	48%	196	54%
HARRISON	167	334	197	59%	206	62%	250	75%
HOBOKEN	345	690	152	22%	201	29%	224	32%
IRVINGTON	706	1412	470	33%	959	68%	1136	80%
JERSEY CITY	3827	7654	1957	26%	2598	34%	3558	46%
KEANSBURG	198	396	169	43%	162	41%	272	69%
LONG BRANCH	361	722	509	70%	501	69%	600	83%
MILLVILLE	475	950	539	57%	506	53%	631	66%
NEPTUNE	323	646	224	35%	240	37%	590	91%
NEW BRUNSWICK *	639	1278	736	58%	942	74%	1406	110%
NEWARK	4351	8702	2603	30%	2908	33%	4017	46%
PASSAIC	1229	2458	689	28%	987	40%	1092	44%
PATERSON	2763	5526	1446	26%	1795	32%	2910	53%
PEMBERTON	438	876	307	35%	390	45%	508	58%
PERTH AMBOY	811	1622	531	33%	828	51%	993	61%
PHILLIPSBURG	265	530	202	38%	209	39%	340	64%
PLAINFIELD	772	1544	90	6%	315	20%	965	63%
PLEASANTVILLE	371	742	443	60%	468	63%	661	89%
TRENTON CITY	1693	3386	1275	38%	1567	46%	1924	57%
UNION CITY	954	1908	738	39%	833	44%	1506	79%
VINELAND CITY	973	1946	800	41%	787	40%	804	41%
WEST NEW YORK	631	1262	507	40%	570	45%	802	64%
TOTAL	**29307**	**58614**	**19179**	**33%**	**22926**	**39%**	**34623**	**59%**

*In districts with growing populations of young children, first grade enrollment can underestimate the eligible population.

Late in the 2000-01 school year, funds were given to private organizations to reach out to parents and encourage them to enroll their children in pre-kindergarten. In our view this effort is misguided. Although it does appear that many parents do not know that their children are eligible for a free preschool program, lack of information is not a critical problem. Many parents enroll their children anyway. Others remain on waiting lists. Lack of transportation is a barrier to participation. The fundamental problem is that the state has not provided the facilities and operational funds and support required to substantially expand the number of available places in preschool programs. Districts and contracted programs would aggressively reach out to enroll more children, if they knew that they would have the additional capacity required to serve them.

In sum, enrollment has not increased much because the state failed to alleviate the problems that CEER identified last year. The state did not provide the facilities needed, nor did it provide sufficient funding for districts to expand the spaces available where families need them or provide transportation so that children can reach available spaces. In addition, the state has made little progress toward using Head Start for expansion or bringing existing Head Start classrooms up to Abbott standards. Head Start has refused to operate full-day year-round programs that can not meet Head Start quality standards because of the low state funding level. The state has refused to fund upgrades for existing Head Start classrooms.

V. Program Quality

Early education programs must be of high quality to produce major improvements in the school success of economically disadvantaged children. However, the programs attended by children in the Abbott districts have never had the resources required to provide an intensive, high-quality educational experience. For years, community child care programs struggled to provide the best possible care for the children and families they served with far too little funding. These programs are a source of strength and stability in their communities and provide vital services to the children and families they serve. However, they have faced severe stresses in seeking to develop and maintain adequate staff, facilities, and other resources. Head Start and public school programs have been better funded, though still not at the levels required to provide the educational programs now required. CEER assessed program quality to help determine the present level of quality and the additional resources programs require to fully meet the needs of the children they serve.

In this section, we report our findings on classroom quality. After first describing our measures, we review other research on preschool classroom quality to place the New Jersey results in context. Next, we discuss the results in greater detail and explain what they mean for children's daily experiences. Additionally, we discuss differences in quality by program auspice (public school, Head Start or community program). We also discuss differences in quality across school districts, with particular attention to the district level characteristics that seem to influence classroom quality. Finally, we report findings on the relationship of such program characteristics as teacher education level and experience and child/staff ratio to classroom quality.

Measures of Classroom Quality

Our primary tool for assessing classroom quality was the Early Childhood Environment Rating Scale – Revised (ECERS-R; Harms, Clifford & Cryer, 1998), a standardized measure of preschool classroom structure and process. The ECERS-R has been used extensively in the field and has well-established validity and reliability. ECERS-R scores predict the contributions of a program to child development (including school readiness) and are consistent with other assessments of quality. The scale items correlate highly with characteristics deemed highly important by a panel of nationally recognized experts, and scale scores correlate well with ratings of classroom quality by experts. Reliability as measured by Cronbach's alpha is good, ranging from .81 to .91 across subscales (Harms, Clifford, & Cryer, 1998).

The ECERS-R provides an overall rating of classroom quality as well as ratings on seven subscales and 43 individual items. It is administered through direct observation of the classroom for several hours followed by an interview with the teacher. ECERS observers are trained to high standards of accuracy and consistency before qualifying to conduct observations. Classrooms receive a rating ranging from 1 to 7 for the quality of the environment provided for children, where: 1 is inadequate, 3 indicates minimal support for child development, 5 indicates good support for child development, and 7 is excellent.

The ECERS-R has seven subscales, or sections, that provide separate assessments of quality in each of the following areas: Space and Furnishings, Personal Care Routines, Language-Reasoning, Activities, Interaction, Program Structure, and Parents and Staff. These are explained in greater detail below. Average scores are calculated for each of these subscales. The total scale score is calculated as an average of all 43 items.

CEER also employed a subscale of the Preschool Classroom Inventory (PCI) (Frede, 1989) to assess the quality of teacher's interactions with children with respect to developing children's cognitive abilities. The subscale, Enhancing Children's Cognitive Development, includes eleven items scored on a 5-point scale. Data collectors were trained to administer this instrument through direct observation of the classroom. Each item is scored based on how often a specific behavior is seen during the observation, with scores ranging from 1 (not at all) to 5 (consistently). All of the behaviors describe teaching strategies to encourage children's cognitive development. For instance, one item is "Adults extend children's activities and problem-solving by introducing new materials". Total scale scores are summed across all items.

CEER observers also recorded information on some of the classroom characteristics that past research has found to be related to classroom quality. This includes class size, child/staff ratio, teacher educational qualifications, and teacher experience.

Abbott ECERS Scores for Classroom Quality

During 1999-2000, CEER conducted quality observations in 262 classrooms in the Abbott districts, including 79 public school classrooms, 31 Head Start classrooms and 152 classrooms in community programs. The sample reflects the proportion of children served statewide under these auspices reasonably well. The vast majority of these programs were Abbott funded programs, but there was no difference between programs receiving and not receiving Abbott funds, controlling for auspice. CEER is repeating quality observations in the same classrooms in 2000-01. As only half the quality observations from 2000-01 are available for analysis now, results for 2000-01 can not yet be reported. However, a check of the first half of the 2000-01 data indicates that there was no change at all in quality compared to 1999-2000.

Average total score on ECERS

The overall mean score of the 262 classrooms observed is 3.86. This is slightly lower than the quality of child care centers on average nationally, which is about 4.0. Scores range from 1.19 to 6.39. Twenty-one percent score below 3, indicating that they do not provide even minimal support for child development and raise concerns that some might even be harmful to children's

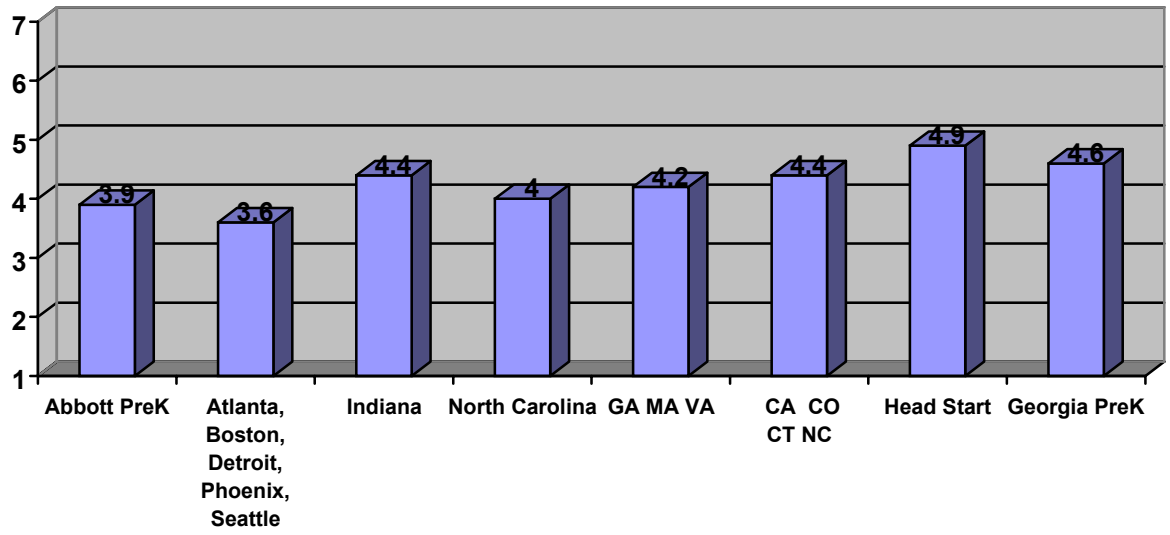
development. Another 64% score between 3 and 5. From other research on the effects of child care, Head Start, and public school programs on children's school success, these programs are likely to have only small effects on children's school readiness (Barnett, 1998). About 15% score 5 or higher and can be classified as "good" classrooms. Moreover, it should be kept in mind, that programs with an average score of 5 almost always have some areas in which they score below 5. Only 2% score between 6 and 7, the level of quality most likely to produce the large gains required to prepare New Jersey's poorest young children to start school on par with their peers throughout the state.

New Jersey's Abbott Districts in Context

Figure 1 shows how classroom quality in New Jersey's Abbott classrooms compares to quality found for early care and education classrooms elsewhere based on the total scores on the ECERS-R (or the very similar pre-revision ECERS). The average score for classrooms in the Abbott districts is somewhat on the low side of the quality scores found in other studies. This is particularly notable since the Abbott district sample contains more public school and Head Start programs (which tend to have more resources) than most of the other study samples. Also, the Abbott district program scores are distinctly lower than for Head Start nationally. However, the Abbott district program scores clearly are similar to the quality scores generally found for early care and education programs in the United States. This is about what would have been expected ***prior to the Court mandate***, especially since Abbott programs serve children in the most disadvantaged communities in New Jersey, whereas most other studies have encompassed a broader socio-economic range where parents and communities have greater ability to pay.

Figure 1.

Comparison of Abbott Classroom Quality (ECERS Scores) with Quality Found in Other U.S. Early Care and Education Studies



Space and Furnishings Subscale

This sub-scale addresses the areas of indoor and outdoor space, room arrangement, furnishings, equipment, and display of children's work. Scoring reflects the extent to which the rooms provide ample space, good ventilation and some natural lighting; outdoor space is safe, easily accessible, and organized so different types of activities can occur; and gross motor equipment stimulates a variety of skills. Additionally, scoring addresses the extent to which room arrangement provides different interest centers and is organized for independent use by children; furniture is child-sized, sturdy and in good repair; furnishings provide for relaxation and comfort with soft toys and a cozy area accessible to children, and space for privacy is provided. Finally, scoring reflects the predominance of individualized children's work and how much of the work displayed is on children's eye level.

Space and furnishings in an excellent classroom have some natural light and good ventilation, with plenty of space for indoor activities. Of course, everything is clean and in good repair. A cozy area with cushions and soft toys, a sand/water table and an easel are other important furnishings. At least 5 different interest centers should be defined around the room, for independent use by the children, with enough materials to change periodically. A place where one or two children may play privately is important – when children are in center-based care they sometimes need time away from a large group. Work that the children have created themselves, and pictures of class events are hung on the walls where the children can see them. This artwork must reflect the process of an individual's idea and effort – the typical bulletin board filled with exact replicas of the teacher's exemplar will not suffice.

In an excellent classroom, the space for outdoor gross motor activities is large enough for the group using it, easily accessible from the classroom, and convenient. For instance, children should be able to use the toilet easily. A variety of ground surfaces permits different types of play, for instance wood chips under climbing equipment and blacktop for riding toys. There is enough equipment so that all the children can have a turn without too long a wait, and equipment is good for a variety of types of play. For instance, there are different size balls, a slide, a climbing structure, tricycles and some outdoor games like ring toss and whiffle ball. Indoor space is also adequate for gross motor play in bad weather, even if it is not typically used for gross motor play.

Space and Furnishings Score

The average score for space and furnishings is 3.7. The range includes a minimum score of 1.00 and a maximum score of 6.25. This average reflects good scores for indoor space (5.10), furniture for care and play (6.61), and room arrangements (5.09). However, low scores on space and equipment for gross motor skills (3.06 and 2.29 respectively) brought down the overall score for acceptable space.

Although many classrooms have indoor space problems, with very small rooms and too little space for the appropriate indoor activities, the situation causing these very low scores is a lack of safe space in which children may develop gross motor skills, and a lack of gross motor equipment. Many classrooms share parking lot space as outdoor gross motor space, which is

clearly better than having no space at all. However, the use of this space is problematic, since it must be fenced and entrances must be gated to provide sufficient safety for the children; and there is no padding under climbing equipment.

All of the 19 classrooms scoring 1 either had no gross motor equipment at all, or one or two pieces of equipment that were clearly dangerous due to the age of the equipment. Some classrooms use playgrounds built for older children that are unsafe for preschoolers - the equipment is too high for them, and often is old and in disrepair. Many of the outdoor play areas had other child hazards like broken glass or were in close proximity to busy streets.

Personal Care Routines Subscale

This sub-scale addresses greetings and departure, meals, naptime, toileting and safety and health practices. Scores reflect the extent to which greetings and departures are organized and warm. Meals should be well balanced, provide a pleasant social atmosphere and encourage child independence, with staff members sitting with the children during mealtime. Nap schedule should be flexible to meet individual needs with provisions made for early risers and children not requiring a nap. Scores reflect whether sanitary conditions are maintained for toileting, with convenient and accessible facilities for children, and pleasant staff-child interactions. Finally, procedures used to ensure a safe and healthy environment are scored.

Expectations for personal care routines in an excellent classroom are that children are greeted warmly when they arrive, along with their parents, and helped to acclimate and get involved with a classroom activity. They stay busy during the day – children are not sitting and waiting any length of time. During meal times, children not only eat independently, but actively participate in getting ready for the meal and serving. Meal times are preceded by attention to cleanliness: tables are washed and everyone's hands are washed. Everyone (staff and children) participates in quiet conversation at the table. Nap time takes place in a calm, non-punitive atmosphere. Provisions are made for non-nappers and those who rise earlier or sleep later. Cots are at least 3 feet apart, and there may be soft music.

Health and safety are prime concerns. Handwashing after toileting and before eating always takes place for everyone. Bathrooms are convenient and clean, and children are assisted as they need help in a non-punitive atmosphere. Although there may be a scheduled bathroom time, children are never made to wait for the scheduled time, even if it is only a few minutes. Excellent classrooms have child-sized toilets and low sinks, with soap and towels within a child's reach.

Children are taught good health practices, with teachers modeling appropriate behavior. Teachers attend to such children's health needs as appropriate outdoor dressing, nose wiping, toilet flushing, and so forth. Toothbrushes are used at least once a day and are properly labeled and stored.

The classroom is arranged so that safety problems are minimized, for instance, play areas are away from doors and stairs. There are no safety hazards, and staff act to prevent safety

problems, cleaning up spills and locking dangerous supplies away. There are written emergency procedures, including important phone numbers, in the classroom.

Personal Care Routines Score

The average score for personal care routines is 3.98, with a range from 1.0 to 7.0. Although the range of scores is wide, the overall score indicates a great need for improvement in the daily practice of personal care routines for children in preschool classrooms. Areas of concern on this subscale are low average scores on Meals and Snacks (3.27), Nap/rest (3.43) and Safety practices (3.86).

An inadequate score on safety practices is of immediate concern for the health and safety of children in the classroom. This score reflects hazards that could result in serious injury indoors or outdoors, and/or inadequate supervision to protect children's safety. In many cases, hazards observed were associated with the outdoor gross motor areas already discussed above, but also lowering the score are many observations of teachers leaving children unsupervised in the classroom. This usually happens when one teacher is left alone with a group of children, one or more of whom need to use a bathroom which is located outside of the classroom. Additional hazards were observed, such as uncovered electrical outlets, electrical cords dangling and unsafe items stored in bathrooms. In other classrooms, staff simply did not pay careful attention to what the children were doing.

Low scores in the meals/snacks area are often due to a lack of attention to sanitary conditions; for example, everyone must wash hands before eating and tables must be washed. However, some classrooms scored poorly for serving non-nutritious foods to children. In one classroom we observed, only water was served to the children for snack.

Scoring in the area of toileting/diapering (average score 4.30) is also lowered across the state by a lack of hand-washing; however, many classrooms were lacking soap, towels or tissue paper, and several classrooms were lacking in close enough supervision of the children's toileting behaviors. Many classrooms have adult-sized facilities with no provision for the needs of small children.

Language-Reasoning Subscale

This sub-scale focuses on formal and informal communication, including the language and reasoning opportunities available for children. Scores reflect the selection of books and other literacy materials available and the frequency with which they are used. Observers rate the extent to which staff balance listening and talking, introduce concepts in response to children's interests or needs to solve problems, and link children's spoken communication with written language. Scores also represent the extent to which staff talks about logical relationships while children play with materials that stimulate reasoning. Finally, staff use of open-ended questions, and individual conversations with children is reflected in scoring.

A high scoring classroom has a wide selection of books available for children to look at most of the day. The books are organized and rotated in a reading center, with some books

related to current activities in the classroom. Staff read to children both formally, during circle time, and informally during free play. There is a lot of talking and listening going on in the classroom. Staff talk with children while playing with them - they get involved in children's thinking and extend it by writing down what they mean to say, by helping them think through a problem or reason through a question, and by helping them remember something that happened before. Staff has real conversations with children, at the same time encouraging them to use more complex language.

Language-Reasoning Score

The average score for language and reasoning is 3.74, with a range from 1.0 to 7.0. Surprisingly few classrooms are well-stocked with literacy materials – only 17% scored a 5 or better on the Books and Pictures item. In some cases lower scores reflect that although classrooms did supply a good number and variety of books and literacy materials, children were not read to during class, or were not provided access to books for a substantial portion of the day.

The greatest concern, however, is in the use of language to develop reasoning skills. The average score in this area is 2.84, with nearly 70% of classrooms scoring a 3 or lower. Although children and teachers are talking throughout the day, staff do not use language to help children extend their reasoning abilities, or to encourage their exploration of concepts. This situation makes it unlikely that these programs will have the desired effects on children's school readiness. Improvement in this area will require teachers to be trained to recognize what kinds of activities and what kinds of discussions can extend children's reasoning skills.

A few examples of excellent language-reasoning practices from anecdotal field notes:

> During circle time the children "took a walk" with pictures, props and stories to talk about community helpers, the theme of the week. The teacher involved all of the children in the discussion. As they passed the bakery, they pretended to smell the bread baking, and they covered their ears as fire engines raced by. The children seem to really enjoy being in school.
>
> Children use books in many ways (free choice reading, copying to construct their own books, recalling stories in the house area). There is a genuine excitement for storytime. Teachers provide opportunities for children to plan, think about and recall past experiences.

Activities Subscale

This sub-scale assesses activities in the classrooms in the following areas: fine motor, art, music/movement, blocks, sand/water, dramatic play, nature/science, math/number, use of video/computer, and diversity. Materials and activities that support each of these areas should be accessible and available for a substantial portion of the day. Classrooms should have several different types of fine motor materials including small building toys (for instance, interlocking blocks and Lincoln logs), art materials (crayons and scissors), manipulatives (beads of different sizes for stringing, pegs and peg boards or sewing cards), and puzzles of differing levels of difficulty.

Additionally, various types of music should be available as both a free choice and group activity. Sand and water play with appropriate toys should be accessible, and a variety of dramatic play materials available. Materials for math and science to help children experience counting, measuring, comparing quantities, and fostering exploration should be available. Finally, the amount of time that children are allowed to use TV, video or computer is limited, and the programs are considered educational for children.

A classroom scoring high on this subscale has plenty of materials available for children to use for most of the day, to explore art, music, math and science, and fine motor development. Various types of materials within an area, at different levels of difficulty, are available. For instance, Legos, large building blocks and shape blocks are found in the Block area; not just crayons, but thin and thick crayons, felt tips, paint pencils and thick magic markers are found in the Art area. There are dress up clothes and props to support dramatic play for a variety of themes, with different cultures represented. Some of these props may be taken outside. Materials can be rotated to make room for different themes. A sand/water table is provided, sometimes with bubbles or colored sand or some other variation.

Math materials help children count, measure, compare quantity, recognize shapes and learn numbers. Examples include rulers, scales, counting objects, magnetic numbers, foam numbers, number puzzles, all kinds of number games. Science materials include collections of natural objects (like rocks, leaves, etc.), and items such as magnets, magnifying glasses, and thermometers to be used in simple experiments. Living things (plants, small classroom pets) are found in the classroom, with children actively involved in caring for them.

Computers are used in the classroom as a free choice activity, and the software used encourages activity and creativity. Staff are actively engaged with children while they use the computer, supporting the children's use of the technology. Television watching is limited appropriately in terms of time and program selection.

Materials found in the classroom show evidence of diverse cultures, ages and abilities, and inclusion is part of daily routines and activities. For instance, there are dolls representing different races, foods, music and art from different cultures, and families encouraged to share their customs.

In addition, in excellent programs teachers enhance learning by adding new materials that integrate themes and concepts. They use incidental activities such as counting napkins for snack, and planned activities such as charting the growth of plants, to extend learning in each of these activity areas.

Activities Score

The average score on activities is 3.19. The range is from 1.0 to 6.2. The highest item scores are for fine motor (3.86) and promoting acceptance of diversity (3.56). The lowest scores are for nature/science (2.60) and art (2.96), however all the item scores are too low. Classrooms score low on the activities subscales for two reasons; either there are only limited materials

available to children, or children are not allowed access to the materials for a substantial period of time. Scores of 1 or 2 indicate a very limited supply of materials in the classroom.

The following is a listing of the percentage of observed classrooms (out of 262 total) scoring only a 1 or 2 for each activities area: Fine motor (21%), Art (45%), Music (40%), Blocks (28%), Sand/water (35%), Dramatic play (44%), Nature/science (58%), and Math (30%). The high frequency of these very low scores for activities that support young children's cognitive development is extremely troubling.

Interaction Subscale

This area addresses supervision of children, discipline, staff-child interactions, and interactions among children. Scoring reflects the extent to which staff talk with children during their play, asking questions and adding information to extend children's thinking, while balancing children's need to explore independently. Additionally, scoring reflects the extent to which staff consistently involves children in solving their own conflicts and problems, help with resources to enhance play and help children develop positive social interactions. Finally, the effective use of non-punitive discipline methods and a climate of warmth and respect for children influence scoring.

Teachers in a classroom scoring high on interactions supervise in a positive manner, never punitive, and interactions between them and the children are pleasant. Staff supervises and helps children, balancing the children's need to explore independently with their need for support and guidance. Mutual respect is encouraged between everyone, and staff shows warmth toward children. In a classroom such as this, most of the interactions between children will be positive, but when it is needed, discipline encourages children to resolve conflicts themselves and to develop an understanding of the reason for rules and positive social behavior.

Interaction Score

The average score for interaction is 4.47, with a range of 1.0 to 7.0. The highest subscale score is for staff-child interaction (average score 5.37) indicating that teachers are generally showing warmth, listening to children and responding to them sympathetically. However, the overall score for interaction is lowered by the gross motor supervision scores (4.01) and discipline (3.92). Over 36% of classrooms score 3 or below on discipline. In these classrooms, interactions between children and adults may be harsh or unpleasant, with adults raising their voices and not communicating respect for children's feelings. There were observed instances of children left to cry after being severely reprimanded without any reasonable explanation for the reproach. Several instances of conflict among children were observed in which staff did not assist children in resolving those conflicts.

To improve these scores, staff could be trained to use techniques such as redirection, praise for positive behavior, and setting up the environment for less potential conflict. They could help children with conflict resolution instead of punishing them, by supporting the children as they try to talk through conflict, and by modeling positive social behaviors.

Program Structure Subscale

This area addresses the classroom operations and schedule. Scoring reflects the extent to which scheduling provides a balance of structure and flexibility, with a substantial portion of the day used for free play activities, both indoors and out, with ample and varied toys, materials and equipment provided. Additionally, scoring reflects whether supervision facilitates children's play and is used as an educational interaction, and whether transitions are smooth between events with no long periods of waiting; whether whole group gatherings are limited to short periods, and whether there are opportunities for children to be part of self-selected small groups or to play independently; and whether children with disabilities are integrated into the group.

What does program structure look like in an excellent classroom? The day is characterized by a balance of structure and flexibility, with a variety of play activities, including a substantial amount of free play, included. Activities occur with different groupings of children, some whole group, some small group, and teachers spend some time with individual children. There is a balance between teacher-directed and child-directed activities, and children have at least one play period out of doors each day, weather permitting. Transitions between events are smooth, without a lot of waiting around for the children, and a posted schedule relates generally to what happens in the classroom. If a child needs a longer time at an activity, while another child needs to move on before others are ready, changes are made to the flow of activities to allow these needs to be fulfilled.

Program Structure Score

The average score for program structure is 3.81 with a range of 1.0 to 7.0. The areas of most concern for this subscale are scheduling (3.47) and free play (3.5), with more than half the classrooms scoring 3 or below on each. Scheduling scores are low due to a lack of both indoor and outdoor time, a lack of time for both fine and gross motor development, and the absence of a posted daily schedule that relates generally to classroom activities. To improve scores for the free play subscale, free-play periods could take place each day both indoors and outdoors, with staff facilitating children's learning through their play. Additionally, children could spend some time during the day in small groups or working on projects individually, instead of spending the whole day in a large group.

Parents & Staff Subscale

This area addresses supports for parents and staff. For a score in the excellent range, parents must participate in an annual evaluation of the program and have opportunities to be involved in decision-making roles with staff. Child-related information must be shared frequently between parents and staff. A variety of alternatives should be used to encourage family involvement, with parents referred to other professionals when needed.

Additionally, staff should be provided adequate space and time away from children, and have planning time together at least every other week, with responsibilities shared and clearly defined. Annual supervisory observation should be provided along with written performance evaluations, with frequent observations and feedback given to staff, including self-evaluations.

Action should be taken to implement the recommendations of evaluation. Orientation and in-service training should be provided regularly, and monthly staff meetings should include staff development activities.

Provisions for parents and staff in an excellent classroom include a parent handbook for each family explaining program approaches and policies, and parents as members of the governing board. Parents annually evaluate the program, and throughout the year there are several avenues for parent involvement, such as parent-teacher conferences, parent meetings, newsletters, classroom participation opportunities. This classroom is likely to have parents talking with the staff at drop-off and pick-up times, sharing information between home and preschool. Parents may come in to spend their lunch hour with their child, or are welcome to spend some other time in the classroom in a way that fits their schedule.

Staff is comfortable in the workplace, with safe space to put their personal belongings, an adult-only restroom, and adult-sized furniture in a staff-only lounge. They can take flexible morning and afternoon breaks, in addition to a lunch break, each day. There is convenient access to a phone, office space, and space for conferences and meetings.

Staff performance is evaluated annually in writing, and recommendations are set into action with in-service training. Monthly staff meetings include staff development activities, and all staff are oriented toward program policies on discipline, family involvement and curriculum issues. All of the staff with less than an Associates degree are continuing to obtain further formal education.

Parents & Staff Score

The average score for the parents and staff area is 4.59, with a range of 1.4 to 7.0. The highest scoring areas overall are supervision of staff (5.48) and staff interaction (5.45), indicating good supervision and evaluation of staff, and good interaction among the staff. However, an area for improvement is in meeting the personal needs of staff (3.32). Only 23% of classrooms score a 5 or above on this item. Teachers in low scoring classrooms indicate that they are unable to take breaks or lunch, and there is no separate adult restroom available to them. Additionally, there is no separate conference space available, few provisions for the secure storage of staff belongings and access to a phone is limited.

ECERS scores by auspice

Table 3 presents average ECERS scores and standard deviations, calculated separately for public school/Head Start and community programs, in addition to overall state averages. Public school and Head Start programs are not discussed separately because of the relatively small number of Head Start programs and the lack of differences in scores between these two types of programs. However, Public School/Head Start programs do significantly differ from community programs in quality. On average, the community programs score significantly lower than public school and Head Start programs on all subscales, although it is important to recognize that under each auspice some classrooms score in the inadequate range and some above good. Given the historic differences in funding levels the average difference in scores is to be expected. There

was no significant difference in scores between community programs that did and did not contract with districts.

The public school/Head Start scores on the Interactions and Parent and Staff subscales reflect good classroom practice, on average, in terms of interactions between staff and children, and between staff and families. Among the 110 classrooms observed in the public school/Head Start group, there are 39 classrooms scoring a 6 or 7 on Interactions, while only 8 classrooms score a 1 or 2. Parent and Staff high scorers include 29 classrooms with a 6 or 7, while no classrooms scored a 1 and only 2 classrooms scored a 2 on this subscale.

No classroom under either auspice attained a score of 7, and both auspices have classrooms that score in the inadequate range. The range of total scores on the ECERS for the community preschools (1.2- 6.2) extends nearly a full point below the range for public school/Head Start (2.2-6.4). Just 4% of public school/Head Start classrooms provide inadequate quality (scores below 3), but 34% of community programs score below 3. It is distressing that less than a quarter of the public school/Head Start classrooms score at least good (above 5), and only 9% of community classrooms score above 5.

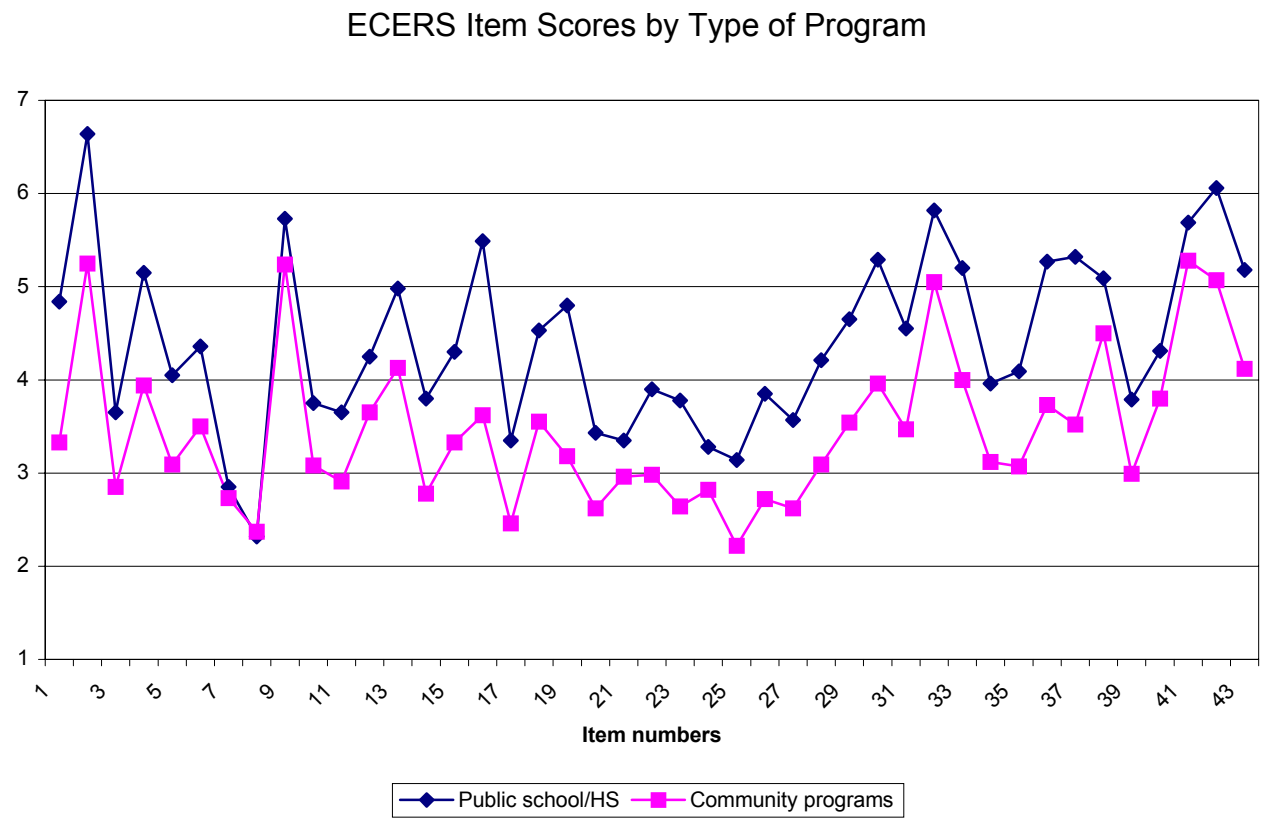
Table 3. Total Average ECERS scores (standard deviations in parentheses)

	Overall	Public School/Head Start	Community
Space and Furnishings	3.73 (1.10)	4.21 (.94)	3.38 (1.08)
Personal Care	3.98 (1.56)	4.41 (1.50)	3.67 (1.52)
Language	3.74 (1.38)	4.42 (1.18)	3.24 (1.31)
Activities	3.19 (1.05)	3.74 (.90)	2.79 (.98)
Interactions	4.47 (1.59)	5.10 (1.36)	4.01 (1.59)
Program Structure	3.81 (1.80)	4.51 (1.70)	3.30 (1.71)
Parent and Staff	4.59 (1.21)	5.02 (1.04)	4.27 (1.23)
Average ECERS score	3.86 (1.06)	4.39 (.86)	3.47 (1.03)

ECERS-R scores by item

Figure 2 presents scores on each item for public school/Head Start and community classrooms. The items and their corresponding numbers are listed on the following page. Although community classrooms score lower on average across all items, all types of classrooms have similar the patterns of highs and lows, indicating that they have similar strengths and weaknesses. For instance, both types score relatively high on items measuring basic furnishings,

and score low on items measuring space and equipment for children's gross motor experiences. Teachers in both types tend to score high on greetings and departure times and score low on nap, toileting and safety practices. Both score low across the board on such activities as art, music, science and math, areas that are important for children's cognitive development.



Early Childhood Rating Scale: Subscales with Items by Number

Space and Furnishings 1. Indoor space 2. Furniture for routine care, play and learning 3. Furnishings for relaxation and comfort 4. Room arrangement for play 5. Space for privacy 6. Child-related display 7. Space for gross motor play 8. Gross motor equipment Personal Care Routines 9. Greeting and departure 10. Meals and snacks 11. Nap/rest 12. Toileting 13. Health practices 14. Safety practices Language-Reasoning 15. Books and pictures 16. Encouraging children to communicate 17. Using language to develop reasoning skills 18. Informal use of language Activities 19. Fine Motor 20. Art 21. Music/entertainment 22. Blocks 23. Sand/Water 24. Dramatic play 25. Nature/Science 26. Math/number 27. Use of TV, video and computers 28. Promoting acceptance of diversity	Interaction 29. Supervision of gross motor activities 30. General supervision of children 31. Discipline 32. Staff-child interactions 33. Interactions among children Program Structure 34. Schedule 35. Free play 36. Group time 37. Provisions for children with disabilities Parents and Staff 38. Provisions for parents 39. Provisions for staff personal needs 40. Provisions for staff professional needs 41. Staff interaction and cooperation 42. Supervision and evaluation of staff 43. Opportunities for staff professional growth

Items listed here can be matched by number to the horizontal axis in Figure 2.
Source: Harms, Clifford, and Cryer, 1998, p. 7.

PCI Scores

The section of the Preschool Classroom Inventory (PCI) administered by CEER in 1999-00 focuses on specific teaching behaviors that are important for stimulating the cognitive development of young children. In particular, this section of the PCI examines the ways in which teachers work to embed skill learning in children's everyday activities and problem solving, extend the complexity and depth of children's thinking, conceptual understanding, and abilities to express and reflect on their thoughts. The possible range for item scores and the overall average score is from 1 (low) to 5 (high).

The results reveal a pattern of very low scores for all items across all types of classrooms. The average across all 11 items in the PCI was 1.44 for all types of programs. Head Start and public school programs score slightly higher on average (1.60) than do community programs (1.33). On no item does the average for all programs attain a score of 2, and this score is barely reached by public school/Head Start programs for just two items. A score of two indicates that teachers seldom use these techniques. On seven of the 11 PCI items, at least 75% of classrooms scored a 1; these strategies for supporting cognitive development were not used at all in those classrooms. Eight of the items had less than 2% of classrooms scoring a 5, where the strategy is observed very often. Low scores on the PCI across most classrooms are especially troubling because the PCI measures teaching techniques for enhancing cognitive development. For example, helping children gain emergent literacy abilities, assisting children in comparing numbers and amounts, and asking questions that require divergent thinking.

Differences in ECERS and PCI scores Across Districts

Auspice isn't the only factor associated with significant differences in classroom quality. School district is also an important factor in quality. In fact, there are significant differences on all subscale scores, the average ECERS score, and the average PCI score, by district.

Abbott districts have much in common, but there are several important attributes on which Abbott districts differ. These attributes, which include the size of the district population of preschool children, poverty level, ethnicity, and the average maternal education level in the district, were examined to determine whether they might be related to differences in classroom quality by district. Poverty level was measured as the percentage of children receiving free or reduced price school lunch.

Multivariate statistical analyses indicate that all of these district level attributes are sometimes related to differences in classroom quality scores. However, the average maternal education level, poverty level and number of preschool children in the district are the most strongly and consistently related to variation in quality. Lower levels of maternal education, a higher percentage of children in poverty, and a larger population to serve are all associated with lower levels of quality. In fact, these district level attributes are associated not just with classroom quality, but the variables associated with quality, such as teacher education and child/staff ratio. For instance, in districts where average maternal education level is higher, the child/staff ratio and number of children enrolled in classrooms is lower while the number of teachers with four-year college degrees is higher.

Classroom characteristics related to classroom quality

In 1999-00 classrooms were not held to either the class size or teacher certification requirements specified by the Court. Class size changes could be made relatively quickly, but changes in teacher qualifications have been allowed more time. Teachers of preschool children in the Abbott districts had an average of approximately 10 years of experience teaching children under the age of five years, although the variation among teachers was quite wide (range of 0 to 35 years experience, standard deviation of 8.25 years). Over 30% of the teachers were relatively new to the field, with less than 5 years experience. Teacher education levels differed by auspice, because public schools required a bachelor's degree and certification (78% BA, 22% MA). Over half of all teachers reported some training in early childhood education (ECE). Teachers with a BA in early childhood were 56% of the total in public schools and 15% in community programs. Child/staff ratios did not significantly differ between public schools and community programs. Community programs had slightly greater numbers of children (16 per class in public schools, 16.9 in community programs) and staff present in the classrooms.

VI. Conclusions and Recommendations

Our research findings underscore the need children in New Jersey's poorest school districts have for high quality early education and the extent of the State's failure to provide these programs. Kindergarten students in the Abbott districts lag substantially behind the national average in language abilities at school entry, which means they are even further behind the average child in the suburbs (who is above the national average). Based on our 1999-2000 estimates of quality—which does not seem to have improved this year—and this year's enrollment rates, less than 10% of children receive a program that can even be called good three years after the Court order for high-quality preschool education in the Abbott districts. Access to preschool programs in the Abbott districts has increased little. The programs that are operating have not attained the levels of quality necessary to meet the needs of the children. The vast majority of classrooms in the Abbott districts still lack the resources to make a meaningful difference in children's school readiness.

In assessing the reasons for the lack of enrollment in preschool programs in the Abbott districts, others have suggested that many parents may not want to send their children to "school" at age three or four. Our surveys have found that this amounts to blaming the victims of the state's failures. The vast majority of the parents want more rather than less early education for their children. And, many parents do not even know their child is eligible for a program. Yet, it is not outreach that limits enrollment, but lack of capacity. District administrators are reluctant to recruit large numbers of additional children when they believe that the state is unwilling to provide the facilities and funds to serve more children or provide transportation. Finally, the parents in the Abbott districts should not be expected to send their children to just any program, no matter how poor the quality or how poorly suited to the needs of their child and family. Enrollment rates and program quality are inextricably linked.

Most preschool classrooms in the Abbott districts were found not to provide a high quality education. Low scores on the ECERS and PCI indicate that the vast majority did not

provide children with experiences that would produce large gains in language and cognitive abilities. Inadequate facilities and materials are implicated in the lack of high quality experiences in science, math, art, music, and dramatic play. Inadequate teacher support, preparation, and professional development also play a role. There are some positive findings regarding teachers. On average, staff interactions with children are warm, and teachers listen and respond to children. Nevertheless, teachers' efforts to enhance children's language and reasoning are inadequate, teaching techniques that build children's cognitive abilities are infrequently used, and discipline is often harsh. Most teachers did not have four-year college degrees, and few had degrees in early childhood education. Although teacher qualifications could have improved somewhat since 1999-00, classroom quality does not appear to have improved in 2000-01.

The source of these problems is the state's failure to adequately fund preschool education. Preschool programs are asked to deliver a service equivalent in quality and resource requirements to kindergarten or first grade, but with a smaller class size and a teacher assistant, for less than the cost of kindergarten or first grade. Community child care providers, in particular, face an impossible task. They are required to provide the same high-quality educational program plus up to 10 hours per day, 250 days per year of child care at a funding level that is arbitrarily capped at less than the cost of elementary school (which is about 6 hours a day, 180 days). Generally, this can not be done; so quality is sacrificed to provide the necessary hours of care. Thus, the state's insistence that district-operated preschool programs also provide up to 10 hours of care for 250 days with inadequate funding this fall, is a plan guaranteed to level down quality.

In essence, state preschool policy has been to try to create the appearance of compliance with the Court while minimizing state spending and continuing to treat early education as little more than babysitting. Many examples can be cited beyond the basic issues of program quantity and quality that are the focus of this report. For example, the state established an early childhood teacher certification, but de facto waives the test that all other teachers are required to pass for licensing and set funding levels inconsistent with adequate teacher compensation. The state's failure is doubly unfortunate. It is unfortunate for each new cohort of children who enter school in the Abbott districts with the odds against them. Far too few of these children attend excellent early education programs. Far too many attend programs that provide less than minimal support for their development. It also is unfortunate for the taxpayers of New Jersey. If sufficient tax dollars were devoted to high quality early education in the Abbott districts, the future returns to taxpayers from decreased costs of school failure, delinquency, and crime, and increased workforce productivity would far exceed the cost (Barnett, 1993; Reynolds et al., 2001).

The state need not continue with the policy of failure begun under the Whitman administration. As Ebenezer Scrooge recognized when shown the consequences of his actions for the past, present, and future: "*Men's courses will foreshadow certain ends, to which, if persevered in, they must lead. But if the courses be departed from, the ends will change."* The new Governor and Commissioner of Education can reject the policies of the past and change the ends by fully complying with the Court order and upholding their constitutional obligations to the children of New Jersey. This will require immediate and dramatic actions. To assist them with this important task we present a set of recommendations based on our study.

1. The Commissioner of Education should approve the funding requests in the districts' 2001-02 preschool plans. The Commissioner should instruct districts to include provisions for Head Start's full participation, to request funds to accomplish this objective, and to revise their plans so as to ensure that they are adequate to achieve projected enrollments. The state operated districts, in particular, would benefit from additional state assistance and instructions for planning as they currently project serving less than half the eligible children.

2. The Commissioner of Education should initiate discussions with the plaintiffs in the *Abbott* case to seek an agreement that would allow for the adoption and implementation of a plan for full implementation of the *Abbott* preschool program within a reasonable period of time. This agreement should set out a realistic timeline and a realistic budget for compliance with the court mandate to provide all children with high-quality preschool education and for compliance with the state's requirement to provide full-day, year-round care. This plan should include a requirement that all districts assess the needs of their children and the capacity of their programs including the quality of each classroom as a means to developing realistic district plans. The state plan would be revised based on any new information obtained from these district efforts.

3. The Governor should designate someone in his office to work with the Commissioner of Education to coordinate activities of the Department of Education, Department of Human Services, and Higher Education Commission as necessary to assure speedy implementation of efforts by other state agencies that are required to support the state and district preschool plans.

4. The state office of early childhood education should be redeveloped to support all aspects of early childhood programs in the Abbott districts, as well as EPCA programs generally. This office should be the single point of contact with a single set of regulations and procedures for program implementation, facilities, funding, as well as for accurate and timely data on early childhood programs. It should be able to work with districts and community providers to develop an accountability system.

5. The Commissioner of Education should take the following additional actions:

(a) Approve a single set of facilities standards for all preschool programs in the Abbott districts, and establish streamlined procedures to accelerate facilities development.
(b) Require newly certificated preschool teachers to take a nationally recognized exam in order to be licensed.
(c) Develop a process for rapidly building the capacity of higher education to prepare existing teachers to obtain the P-3 and to provide an adequate stream of teachers in the future.
(d) Implement a preschool teacher recruitment plan that includes national advertising, signing bonuses, and loan forgiveness in return for teaching in Abbott preschool programs.
(e) Create a statewide technical assistance system for early childhood education. Such a system could partner higher education with school districts to create regional centers.
(f) Sponsor initiatives to develop highly effective approaches to (1) the education of children from homes where English is not the primary language, and (2) inclusion of children with special needs in the regular preschool classroom.

VII. References

Alpern, G., Boll, T., & Shearer, M. (1994). *Developmental Profile II.* Los Angeles: Western Psychological Association.

Barnett, W.S. (1993). Benefit-cost analysis of preschool education: Findings from a 25-year follow-up. *American Journal of Orthopsychiatry*, *63* (4), 500-508.

Barnett, W.S. (1998). Long-term effects on cognitive development and school success. In W. S. Barnett & S. S. Boocock (Eds.) *Early Care and Education for Children in Poverty* (pp. 11-44). Albany, NY: SUNY Press.

Barnett, W.S., Tarr, J.E., & Frede, E.C. (1999). *Children's Educational Needs and Community Capacity in the Abbott Districts*. New Brunswick, NJ: CEER, Rutgers University.

Dunn, L.M., & Dunn, L.M. (1997). *Peabody Picture Vocabulary Test-Revised*. Circle Pines, MN: American Guidance Service.

Dunn, L.M., Padilla, E.R., Lugo, D.E., & Dunn, L.M. (1986) Test de Vocabulario en Imagenes Peabody. Circle Pines, MN: American Guidance Service.

Entwisle, D., Alexander, K., & Olson, L. (2000). Summer learning and home environment. In R. Kalenberg (Ed.), *A notion at risk: Preserving public education as an engine for social mobility.* NY: Century Foundation.

Frede, E.C. (1989). *Preschool Classroom Inventory.* New Brunswick, NJ: CEER, Rutgers University.

Frede, E.C. (1998). Preschool program quality in programs for children in poverty. In: W.S. Barnett & S.S. Boocock (Eds.), *Early care and education for children in poverty* (pp. 77-98) . Albany, NY: SUNY Press.

Harms, T., Clifford, R.M., & Cryer, D. (1998). *Early Childhood Environment Rating Scale (ECERS-R)*. New York, NY: Teachers College Press.

Meisels, S. J., Marsden, D.B., Wiske, M.S., & Henderson, L.W. (1997). *Early Screening Inventory-Revised*. Ann Arbor, MI: Rebus, Inc.

Reynolds, A.J., Temple, J.A., Robertson, D.L., & Mann, E. A. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up of low-income children in public schools. *JAMA*, *285*(18), 2339-2346.

Tarr, J.E., & Barnett, W.S. (2001). *Needs assessment and implementation of universal preschool programs: Newark, NJ, 1999-00.* New Brunswick, NJ: CEER, Rutgers University.