

**Nebraska Early Childhood Education Grant Program**

*July 1, 2004 – June 30, 2005*

**Annual Evaluation Report**

**December 2005**



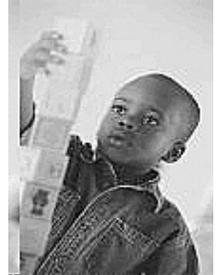
# Nebraska Early Childhood Education Grant Program

## Executive Summary

### July 1, 2004 – June 30, 2005

#### What is the purpose of Nebraska’s Early Childhood Education Grant Program?

Nebraska’s Early Childhood Education Grant Program was designed to award state funds to public schools or Educational Service Units (ESUs) to assist in the operation of comprehensive center-based early childhood programs intended to support the learning and development of children in the birth to kindergarten age range. In most cases the projects expanded and/or combined existing pre-kindergarten programs funded through district, federal, or parent fees, and involved collaboration with Head Start. The purpose of Nebraska’s Early Childhood Education Grant Program is to provide high quality early childhood program settings that assist children to reach their full potential and increase the likelihood of their later success in school.



The early childhood programs are required to serve children in inclusive classrooms that represent the range of abilities and disabilities of the children and the social, linguistic, and economic diversity of the families. The programs target pre-kindergarten age children:

- 1) whose family income qualifies them for participation in the federal free or reduced lunch program,
- 2) who were born prematurely or at low birth weight,
- 3) who reside in a home where a language other than spoken English is used as the primary means of communication,
- 4) whose parents are younger than eighteen or who have not completed high school.

#### Who are the grantees?

In the 2004-2005 year, Nebraska provided early childhood grant funds to 27 districts or Educational Service Units across the state to operate early childhood programs. These programs have been funded from three to thirteen years.



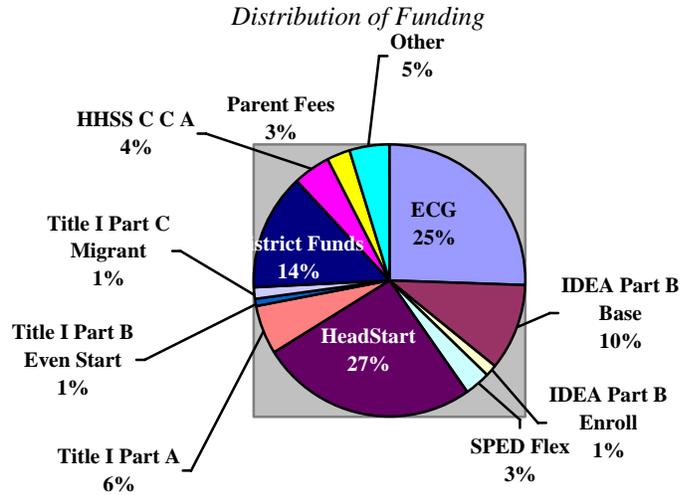
<i>Alliance Public Schools</i>	<i>Lincoln Public Schools</i>
<i>Centura Public Schools</i>	<i>Millard Public Schools</i>
<i>Conestoga Public Schools</i>	<i>Omaha Public Schools</i>
<i>Crete Public Schools</i>	<i>Papillion LaVista Public Schools</i>
<i>David City Public Schools</i>	<i>Plattsmouth Community Schools</i>
<i>Elgin Public Schools</i>	<i>Schuyler Grade School</i>
<i>ESU 1</i>	<i>Sidney Public Schools</i>
<i>ESU 9</i>	<i>South Central Unified System #5</i>
<i>ESU 15</i>	<i>South Sioux City Community Schools</i>
<i>Falls City Public Schools</i>	<i>Southeast Consolidated Schools</i>
<i>Gering Public Schools</i>	<i>Umon'hon' Nation Public Schools</i>
<i>Grand Island Public Schools</i>	<i>Unified School System #2007</i>
<i>Lewellen Grade School</i>	<i>Walthill Public Schools</i>
<i>Lexington Public Schools</i>	

#### Who are the children served?

In 2004-2005, a total of 1,068 children were served across programs. Typical classroom size ranged from 16 to 20 children. The majority of these programs served preschool children and their families. Four-year-old children were the largest group represented (57%), followed by three-year-olds (25%). Fewer were served in the younger age groups. The single largest group was White not Hispanic (55%), followed by Hispanic (22%), Black (12%), American Indian/Alaskan (10%), and Asian/Pacific Islander (1%). Many children (22%) had a home language other than English.

## How are the programs funded?

Programs reported funding for the early childhood programs they operated. The 27 programs reported operational costs of \$8,004,568 in the 2004-2005 program year. Overall, programs exceeded the 50% expectation of match to the \$2,097,000 grant funds provided. Generally, the Early Childhood Education Program funding provided by Nebraska represented a quarter of the funding to operate these early childhood programs.



## What is the quality of the early childhood programs?

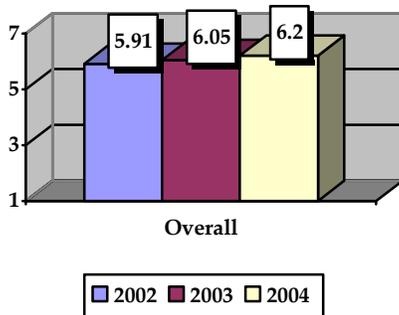
Quality early childhood programs have been linked to immediate, positive developmental outcomes, as well as long-term positive academic performance (Burchinal, Peisner-Feinberg, Bryant, et al., 2000; Ramey & Ramey, 1998). In order to evaluate the quality of the Nebraska programs, a number of different evaluations tools were used, including the Early Childhood Environment Ratings Scale-Revised (ECERS-R) (Harms, Clifford & Cryer, 1998) and the Early Language and Literacy Classroom Observation (ELLCO) (Smith, Dickinson, Sangeorge & Anastasopoulos, 2002), or the Infant/Toddler Environment Ratings Scale-Revised (ITERS-R) (Harms, Cryer & Clifford, 2003). Baseline information was obtained by completing these observational environment rating scales at a sampling of classrooms (at least one from each program). The Nebraska Department of Education has established standards for quality based on each tool.

High quality early childhood settings were demonstrated in 100% of Nebraska's preschool programs

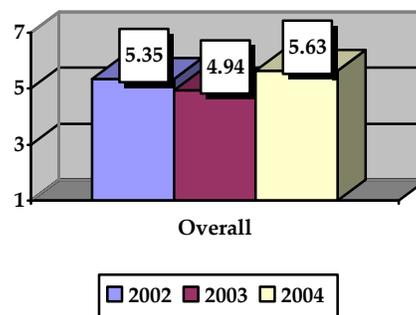
- 100% of the preschool classrooms met Nebraska's indicator of quality standards on ECERS-R
- 100% of the preschool classrooms met Nebraska's indicator of quality standards on the ELLCO

*Cross Year Comparisons.* The preschool classrooms have steadily improved in quality ratings over time. The infant/toddler classrooms have improved since 2002, although some of the classrooms were rated less positively in the fall of 2003. In the spring observation ratings of that year, however, the overall ITERS-R average had improved to 5.94.

*ECERS-R Overall Ratings*



*ITERS-R Overall Ratings*



## How many programs have NAEYC Accreditation?

Programs are encouraged to achieve accreditation by the National Association for the Education of Young Children (NAEYC) within the first 3 years of operation and to keep the accreditation current thereafter. As of December 2005, thirteen of the programs have received NAEYC accreditation (48%). Another nine programs have had their NAEYC accreditation visit, although the results are not yet known.



## What benefit does participation in Early Childhood Grant (ECG) programs have for the children they serve?

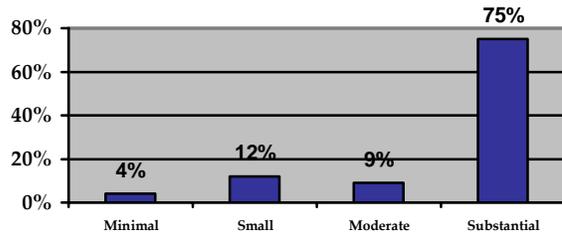
### *Short-Term Outcomes*

*Child Observation Record.* The development and learning of preschool children were monitored through the use of the High/Scope Child Observation Record (COR). The majority of the programs utilize and report on this developmental assessment. Nineteen programs provided outcomes on Preschool COR data for 562 children and seven programs provided outcomes on Infant/Toddler COR data for 69 children. Due to the small number of infants that were assessed with the COR, the data for this group of young children was not analyzed for this report.

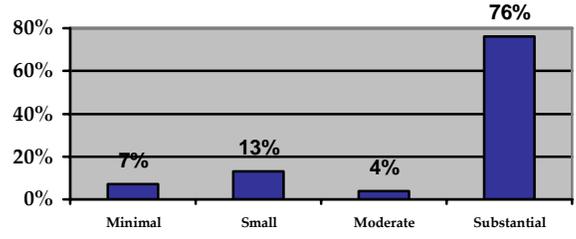
Programs reported the number of children with observation data for the fall and spring, and the number who made minimal (less than .39 gain), small (.4 to .79 gain), moderate (.8 to .99 gain), or substantial (1.0 or greater gain) gains in language/literacy and math/logic. These gains were based on a 5 point Likert scale. As a group, preschool children achieved better than anticipated gains. On average, the majority of the preschool children made substantial gains in math/logic and language/literacy. The following graphs illustrate the percentage of children associated with each category of gain (minimal, small, moderate or substantial) in the area of language/literacy or math/logic.

Preschool Children: Gains Assessed Using High/Scope COR

*Language/Literacy*



*Math/Logic*



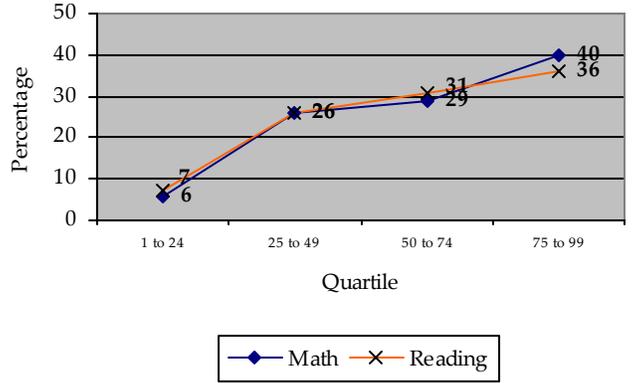
*Long-Term Outcomes*

Nearly 70% of ECG children were at the 50<sup>th</sup> percentile or greater (67% reading and 69% math).

**Standardized Achievement Outcomes.** The long-term impact of an ECG program experience was evaluated by collecting mathematics and reading achievement scores for a sampling of children who attended Nebraska’s state-funded

early childhood grant programs. Results for third and fourth grade students were aggregated from six programs. Seventy children who had attended an early childhood grant program were included in the sample. Of the seventy children included in this sample, 33% were identified as special education students. The assessments included the Stanford, Terra Nova, California Achievement Test, and Gray Oral Reading Test. Nearly 70% of ECG program children were at the 50<sup>th</sup> percentile or greater (67% reading and 69% math).

*Reading and Math Achievement Scores for ECG Children – 3<sup>rd</sup> and 4<sup>th</sup> Grades*

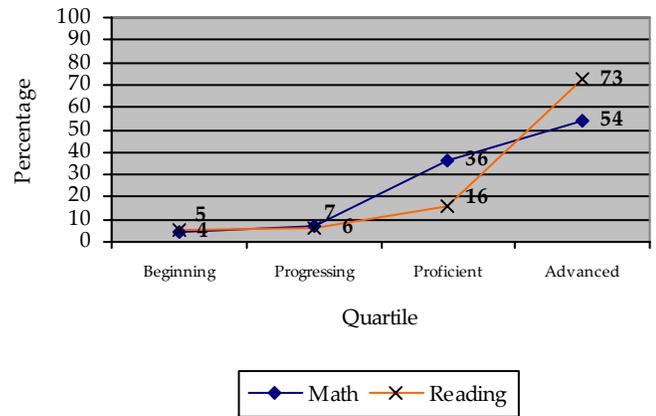


The majority of ECG children met or exceeded district standards in reading (89%) and math (90%).

**Nebraska STARS Outcomes.** Three programs provided STARS outcome data for children who had an ECG program experience. There was an equal split among elementary and secondary students for the STARS reading scores, with 32 in 4<sup>th</sup> grade, 21 in 8<sup>th</sup> grade and 10 in 11<sup>th</sup> grade. A total of 56 students’

scores were included for math scores. Ten percent of the children were identified as receiving special education for the reading scores and 4% for math. The majority of ECG program children met or exceeded district standards (scored proficient or advanced) in reading (89%) and math (90%).

*STARS Math and Reading Aggregate Scores for 4<sup>th</sup>, 8<sup>th</sup> & 11<sup>th</sup> Grade Students with ECG Program Experiences*



**Summary**

Clearly, the results of this evaluation indicate that Nebraska’s investment in early childhood grant programs yielded quality programs for young children, as well as substantial developmental gains for the children currently served and long-term academic gains for those who had been served in these programs.

The full report can be found at [www.nde.state.ne.us/ECH/ECGrantProg.htm](http://www.nde.state.ne.us/ECH/ECGrantProg.htm)

Submitted by:  
**Barbara Jackson, Ph.D. & Lisa St. Clair, M.S.**  
 Munroe-Meyer Institute  
 University of Nebraska Medical Center



## Nebraska's Early Childhood Education Grant Program 2005 Progress Report

### Historical Perspective

Legislative Bill 759 was enacted in the 2001 Legislative Session. It revised the Early Childhood Act originally passed in 1990 (79-1101 through 1104 R.R.S.) which had enabled the funding of ten pilot Early Childhood Projects. The action to revise the law and to increase the funding (from \$560, 000 to \$2,097,000) was a part of then Governor Johanns' early childhood initiative, *Children Can't Wait*. The Early Childhood Education Grant Program is administered by the Nebraska Department of Education, Office of Early Childhood.

### Purpose

Nebraska's Early Childhood Education Grant Program was designed to award state funds to public schools or Educational Service Units (ESUs) to assist in the operation of comprehensive center-based early childhood programs intended to support the learning and development of children in the birth to kindergarten age range. In most cases the projects expanded and/or combined existing pre-kindergarten programs funded through district, federal, or parent fees, and involved collaboration with Head Start. The purpose of Nebraska's Early Childhood Education Grant Program is to provide high quality early childhood program settings that assist children to reach their full potential and increase the likelihood of their later success in school. Major emphases in LB 759 (revised Early Childhood Act) include:

- ✚ Support for *inclusive, integrated programs/services* that include categorically and economically diverse groups of children. The intent is to help communities move away from categorical to inclusive service delivery models.
- ✚ A strong *emphasis on family participation*, in recognition of the critical role of parents in assuring that children grow up in positive, supportive environments that encourage their early development and learning.
- ✚ Attention to *research-based elements of effective programs*. These include: teachers trained to work with young children, optimum adult/child ratios and group size, sufficient intensity and duration of programs, a curriculum based on knowledge about child growth and development, including an emphasis on age-appropriate language and early literacy experiences, and ongoing program improvement processes.

## Where are the Nebraska Early Childhood Education Grant Programs?

In the 2004-2005 year, Nebraska provided Early Childhood Education Grant Program funds to 27 districts or Educational Service Units across the state to operate early childhood programs. These programs have been funded from three to thirteen years.

<i>Early Childhood Education Grant Programs in Nebraska</i>	<i># of Years of Funding</i>
Alliance Public Schools - Alliance Early Childhood Program	3
Centura Public Schools - Bright Beginnings Preschool @ Cairo	9
Conestoga Public Schools - Cubs Preschool @ Murray	3
Crete Public Schools – CIRCLE	3
David City Public Schools - ABC Early Childhood Programs	3
Elgin Public Schools - Elgin Early Learning Center	3
ESU 1 - Growing Together Early Childhood Program @ Santee	3
ESU 9 - Webster County Early Learning Center	3
ESU15 – Kidz Zone & Partners in Parenting @ McCook	9
Falls City Public Schools - Parent-Child Center	13
Gering Public Schools - Project Success	13
Grand Island Public Schools - Gold Star Preschool Program	3
Lewellen Public Schools – Early Childhood Education-Garden County	3
Lexington Public Schools - Lexington Early Learning Center	3
Lincoln Public Schools – ExCITE	3
Millard Public Schools - Early Start Preschool Program	9
Omaha Public Schools - Educare Center of Omaha, Inc.	3
Papillion LaVista Public Schools – Growing Together	3
Plattsmouth Community Schools - Success Now	3
Schuyler Grade School - Early Learning Center	8
Sidney Public Schools – Early Childhood Learning Center	3
South Central Unified System #5 - Clay County Learning Center for Children	9
Southeast Consolidated Schools - Mustang Preschool @ Stella	3
South Sioux City Community Schools - Siouxland Family Center @ Dakota City	3
Umon'hon' Nation Public Schools - Shin'ga Zhin'ga Child Development Center @ Macy	8
Unified School System #2007 - HTRS Early Childhood Education Center @ Humboldt	3
Walthill Public Schools - Wazhinga Ti Zhingga Early Childhood Center	3

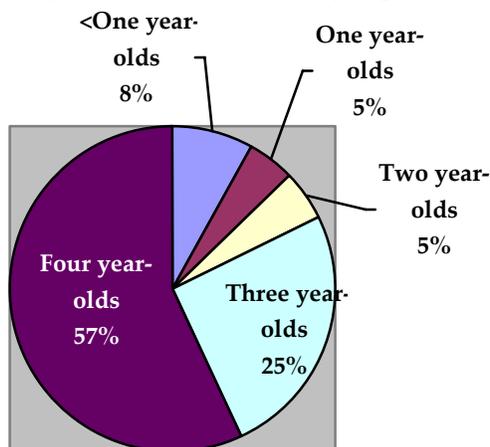
## Who are the Children Served?

The Early Childhood Education Grant (ECEG) programs are required to serve children in inclusive classrooms that represent the range of abilities and disabilities of the children and the social, linguistic, and economic diversity of the families. The early childhood programs target prekindergarten-age children:

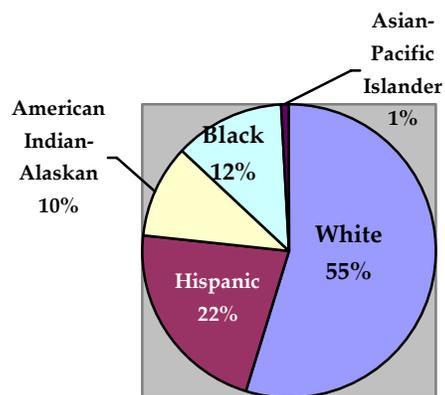
- 5) whose family income qualifies them for participation in the federal free or reduced lunch program,
- 6) who were born prematurely or at low birth weight as verified by a physician,
- 7) who reside in a home where a language other than English is used as the primary means of communication, or
- 8) whose parents are younger than eighteen or who have not completed high school.

In 2004-2005, a total of 1,068 children were served across programs. Typical classroom size included 16-20 children. The majority of these programs served preschool children and their families. Four-year-old children were the largest group represented, followed by three-year-olds. Fewer were served in the younger age groups. The single largest group was White not Hispanic, followed by Hispanic.

*Report of Children Served – By Age*



*Report of Children Served – By Ethnicity*



The early childhood grant programs primarily served children who were from low-income families, evidenced by the sixty-six percent (66%) of children that

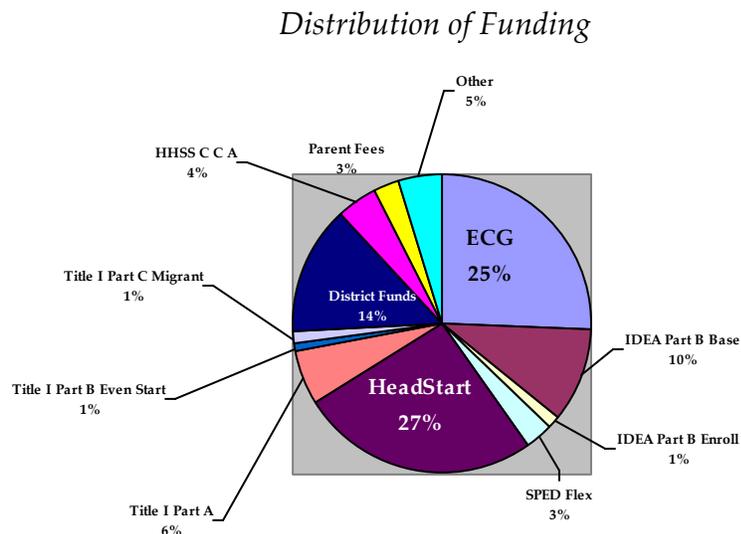
were eligible for free/reduced lunch. The programs served a very small number of children (6%) who were premature or low birth weight. Many children (22%) had a home language other than English. Some children (17%) had parents who were less than 18 years of age or were not high school graduates.

## Funding for the Early Childhood Education Grant Programs

Each early childhood education program awarded a grant receives state funding for up to one-half of the total operating budget of the program. Additional funding sources available to programs may include, but are not limited to: federal Head Start, federal Even Start, federal Special Education, local district funds, and parent fees. Many programs operate multiple classrooms. Programs are eligible to receive state funding as long as the Legislature appropriates funds and the programs are operated in accordance with the requirements of the Nebraska Department of Education.

Programs reported funding for the early childhood programs they operated. The 27 programs reported operational costs of \$8,004,568 in the 2004-2005 program year. Overall, programs exceeded the 50% expectation of match to the \$2,097,000 grant funds provided. Generally, Early Childhood Grant funding provided by Nebraska represented a quarter of the funding to operate these early childhood programs.

The largest categories of funding included: Head Start (27%), Nebraska Early Childhood Grant (25%), Local District funds (14%), and IDEA Part B, Base (10%). Together, these categories accounted for 76% of the funding for these early childhood programs. The remaining categories of funding accounted for 24% of funds.



## What is the purpose of the evaluation?

The purpose of the Nebraska Early Childhood Education Grant (ECEG) Program Evaluation is to provide: (a) descriptive information regarding the program, (b) descriptive child data, and (c) outcome data to assist the program in determining the extent to which the program achieved its anticipated outcomes. This was accomplished by collecting data across multiple sources and forms using quantitative approaches. The Evaluation Plan describes the specific evaluation activities for each of the ECG program objectives. Implementation of the evaluation plan was accomplished through the joint efforts of the early childhood program staff and program evaluation staff. The following provides a description of the program and findings during the 2004 - 2005 year of program implementation.

*Evaluation Plan for the Nebraska Early Childhood Grant Programs*

Objectives	Process Evaluation	Outcome Evaluation
<i>To provide a high quality early childhood program setting.</i>		Evaluation of the quality of the program using environment rating scales.  Documentation of program accreditation.
<i>To assist children to reach their full potential and increase the likelihood of children's later success in school.</i>	Documentation of children's participation in early childhood grant program (ECG)	Evaluation of children's development.  Long term tracking of ECG children's academic achievement in school.

## Program Evaluation Findings

### Nebraska's Early Childhood Programs are of High-Quality

Quality early childhood programs have been linked to immediate, positive developmental outcomes, as well as long-term positive academic performance (Burchinal, Peisner-Feinberg, Bryant, et al., 2000; Ramey & Ramey, 1998).

Environment rating measures and tracking of accreditation statuses were used to evaluate the quality of the early childhood programs for this grant program.

In order to evaluate the quality of the Nebraska programs, a number of different evaluation tools were available to programs including the Infant/Toddler Environment Ratings Scale-Revised (ITERS-R) (Harms, Cryer & Clifford, 2004), or the Early Childhood Environment Ratings Scale-Revised (ECERS-R) (Harms, Clifford & Cryer, 1998) and the Early Language and Literacy Classroom Observation (ELLCO) (Smith, Dickinson, Sangeorge & Anastasopoulos, 2002). The Nebraska Department of Education requires that the early childhood programs achieve a rating of 5 or higher overall for the ITERS-R or ECERS-R, and a 67% of possible score or better on the ELLCO. This expectation is referred to as the state indicator of quality. Comparison data was obtained by completing one of these observational environment rating scales on at least one sample classroom for each funded program. Programs that attain National Association for the Education of Young Children (NAEYC) accreditation during the year are not required to complete environment rating measures because the accreditation process itself includes observation data.

In order to monitor the quality of the programs, external observers were used to observe and rate at least one classroom per funded program in the fall of 2004. If the classroom met the state indicator of quality, a spring observation was not necessary. If, however, the classroom was rated below these quality standards, the program completed a program improvement plan and a spring observation was required. Observers have been trained and inter-rater reliability has been established annually through observer training jointly conducted by the Nebraska Department of Education, Office of Early Childhood, and the Early Childhood Training Center.

### **Environment Rating Scales**

*Early Childhood Environment Rating Scale-Revised.* The mean ratings across the 22 classrooms observed were 5 or higher on all sub-scores and overall. More positively rated sub-scores across the classrooms (average rating of 6 or greater) included space and furnishings, personal care routines, language-reasoning, interactions, program structure, and supports for parents and staff. There was some variability across individual classrooms observed, as reflected in the range of scores. For example, learning activities ranged from 2.70 to 7.00. One classroom observed

**100% of the preschool classrooms met Nebraska's indicator of quality standards (ECERS-R)**

did not meet the state indicators of quality and was observed again in the spring. At that time, it was rated positively (overall score of 5.52) and met the state indicators of quality.

*Fall 2004 ECERS-R Sub-scores and Overall Score*

	Space & Furnishings	Personal Care Routines	Language-Reasoning	Learning Activities	Interaction	Program Structure	Parents & Staff	Overall Rating
Avg	6.03	6.18	6.41	5.62	6.75	6.49	6.48	6.17
Range	4.75-7.00	4.40-7.00	4.70-7.00	2.70-7.00	5.20-7.00	3.25-7.00	5.68-7.00	4.66-6.97
<i>1 = inadequate 3 = minimal 5 = good 7 = excellent</i>								

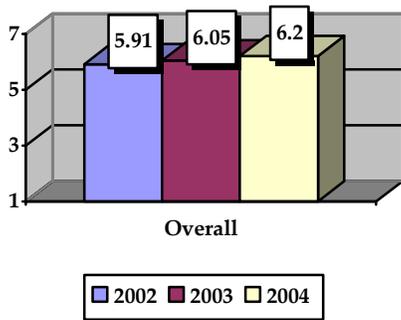
*Infant/Toddler Environment Rating Scale-Revised.* Six classrooms were observed and rated using the ITERS-R. Mean ratings across the six classrooms observed were 5 or higher on all sub-scores and overall, except for personal care routines. More positively rated sub-scores across classrooms (average rating of 6 or greater) included listening/talking, interaction, and program structure. Two of the classrooms observed in the fall did not meet the state indicators of quality and, therefore, required a spring observation. During the spring observation, one then met the state indicator of quality and one did not. For the program not meeting state indicators, an action plan was developed by the program to describe its strategies for improving quality for the upcoming year.

*Fall 2004 ITERS-R Sub-scores and Overall Score*

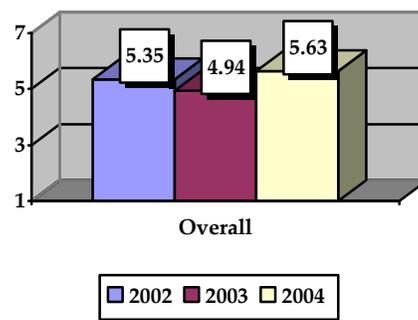
	Space & Furnishings	Personal Care Routines	Listening & Talking	Learning Activities	Interaction	Program Structure	Parents & Staff	Overall Rating
Avg	5.53	4.90	6.39	5.27	6.50	6.40	5.62	5.63
Range	4.20-7.00	3.50-7.00	4.33-7.00	4.30-6.67	5.75-7.00	6.00-6.67	3.71-6.75	4.37-6.81
<i>1 = inadequate 3 = minimal 5 = good 7 = excellent</i>								

*Cross Year Comparisons.* The preschool classrooms have steadily improved in quality ratings over time. The infant/toddler classrooms have improved since 2002, although some of the classrooms were rated less positively in the fall of 2003. In the spring observation ratings of that year, however, the overall ITERS-R average had improved to 5.94.

*ECERS-R Overall Ratings*



*ITERS-R Overall Ratings*



### Early Language and Literacy Classroom Observation

The Early Language and Literacy Classroom Observation, or ELLCO, (Smith & Dickinson, 2002) was used to measure the language and literacy practices of classrooms across Nebraska. The ELLCO is composed of three interdependent research tools. The Literacy Environment Checklist (summarizes the organization and contents of the classroom); the Classroom Observation and



Teacher Interview (gathers the objective ratings of the quality of the language and literacy environment of the classroom); and the Literacy Activities Rating Scale (summarizes the information on the nature and duration of the observed literacy activities). A total of 23 preschool classrooms were observed.

The average scores, the average scores compared to maximum possible scores, and the range of scores obtained on each of the three sections of the ELLCO, are displayed below. In order to meet Nebraska's indicators of quality, a program must obtain a rating of 67% of possible score or greater on each of the three sections of the ELLCO.

**100% of the preschool classrooms met Nebraska's indicator of quality standards on the ELLCO**

*Summary Scores on ELLCO*

	Literacy Environment Checklist (Max of 41)	Classroom Observation (Max of 70)	Literacy Activities Rating Scale (Max of 13)
Average	35 (85% of possible score)	64 (91% of possible score)	11 (85% of possible score)
Range	19-41	50-70	5-13

*Literacy Environment Checklist.* The Literacy Environment Checklist section of the ELLCO measures the organization and contents of the classroom that foster book use and writing. The maximum total score on this checklist is 41. Two classrooms did not meet the state indicator of quality, which necessitated spring observations. Both classrooms clearly exceeded the state indicators of quality on the spring observation with an average rating of 38.

*Classroom Observation.* The Classroom Observation is designed to provide specific criteria about general classroom and language/literacy practices in classrooms based on 14 observation categories using a 5-point Likert Scale (5 being exemplary). Typical items in this category would include organization of the classroom, opportunities for child choice, classroom management and climate, presence of books, approaches to children's book reading and writing, and assessment. All of the classrooms observed met the state indicators of quality. The average across programs was 61, which was 91% of the possible total score of 70.

*Literacy Activities Rating Scale.* The Literacy Activities Rating Scale (LARS) focuses on reading and writing activities observed in classrooms. A maximum score of 13 is possible. Book reading includes the number of sessions/minutes spent in full-group book reading, total number of books read, one-to-one or small-group book reading, and time set aside for children to look at books alone or with a friend. Writing includes observing children writing in their play, children attempting to write letters or words, adults helping children to write, and adults modeling writing. To achieve the state indicator of quality standard, programs must score at least an eight or higher on the LARS. Two classrooms were rated below the indicator of quality and spring observations were completed. In the spring, both classrooms exceeded the state indicators with an average LARS rating of 12.



*National Accreditation.* Another measure of program quality is the attainment of accreditation by the National Association for the Education of Young Children (NAEYC). As of December 2005, thirteen of the programs have received NAEYC accreditation (48%). Another nine programs have had their NAEYC accreditation visit, although the results are not yet known.

## Summary of Objective 1: High Quality Early Childhood Setting

All but one of the programs either met the state indicators of quality (achieving cut scores on observation measures described previously) or obtained NAEYC accreditation or re-accreditation during the program year. The program struggling with meeting quality standards is being provided technical assistance and is required to develop an action plan addressing a strategy to operate a high-quality early childhood program.

## Children Reach their Full Potential and Experience Success in School

Both short-term and long-term developmental outcomes were assessed to determine the extent that children's development was positively associated with participation in the program. Programs used one of several developmental assessments to evaluate child outcomes, including: High/Scope Child Observation Record (COR) for Infants and Toddlers (2004) or Preschoolers (Brinkman, N., Barton, H., and Taylor, L, 2005), Work Sampling System (Meisels, et al, 1995), or Creative Curriculum Developmental Continuum (Dodge, et al, 2005). When three or more programs report on the same developmental assessment, outcomes are included in this report. When two or fewer programs reported on a common developmental assessment, the data are not reported to minimize identification of specific programs. To the extent possible, long-term outcomes were evaluated for those children who remained within the same school district. These analyses were based on 3<sup>rd</sup> or 4<sup>th</sup> grade math and reading scores on standardized achievement tests used by local school districts.

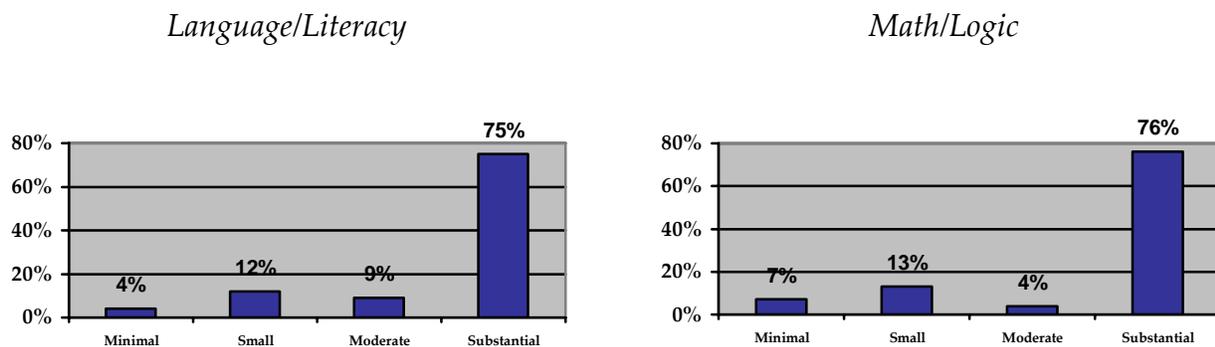
### Short-Term Developmental Outcomes

*Child Observation Record.* The developmental skills of preschool children were monitored through the use of the High/Scope Child Observation Record (COR). COR outcome data provide scores for children on a 5-point scale, with 5 being most positive. The majority of the programs utilize and report on this developmental assessment. Few programs utilized Work Sampling System or Creative Curriculum Developmental Continuum; therefore, these data will not be reported.

Nineteen programs provided outcomes on Preschool COR data for 562 children and seven programs provided outcomes on Infant/Toddler COR data for 69 children. Programs reported the number of children with observation data for

both fall and spring, and the number who made minimal, small, moderate, or substantial gains in language/literacy and math/logic. The gain scores were categorized as follows: minimal (less than .39 gain), small (.4 to .79 gain), moderate (.8 to .99 gain), and substantial (1.0 or greater gain).

As a group, preschool children achieved better than anticipated gains. On average, preschool children made substantial gains in math/logic and language/literacy. The following graphs illustrate the percentage of children associated with each category of gain (minimal, small, moderate or substantial) in the area of language/literacy or math/logic.



Due to the small number of infants that were assessed with the COR, the data for this group of young children was not analyzed.

### Long-Term Educational Outcomes

The Early Childhood Education Grant Program is designed to assist schools and education service units in providing high quality programs that lead to positive long-term outcomes for young children, including ongoing success in school. Long-term outcomes have been tracked for children in state-funded programs that have been in operation sufficient years for follow-up of those children who have remained in the same school district. Based on the targeted population, which would be characterized as “at-risk”, the goal is to have the children achieve at levels comparable to or higher than their peers. Therefore, those at or above

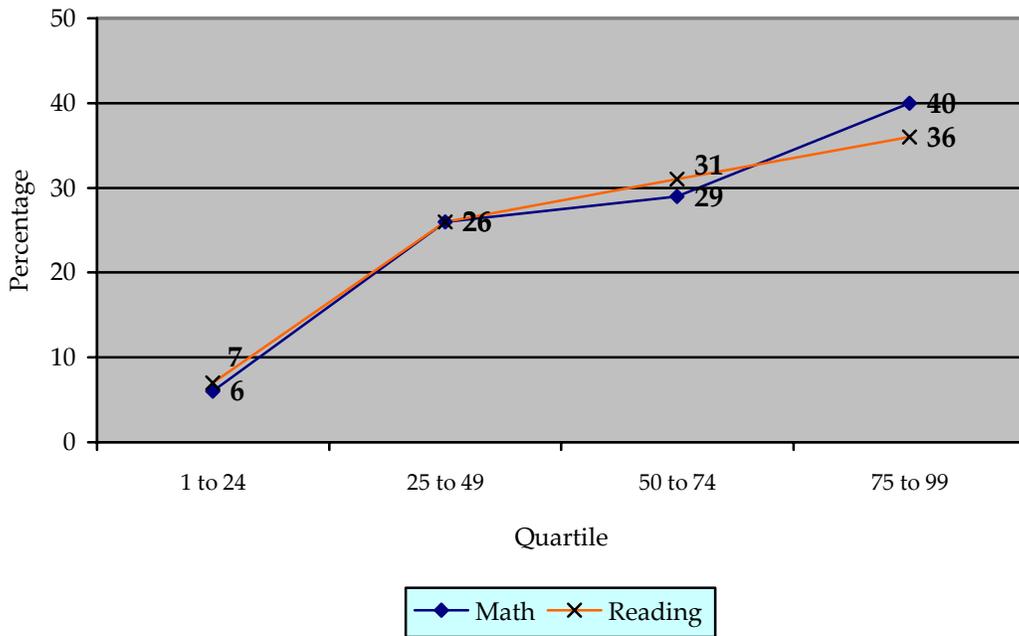


the 50<sup>th</sup> percentile or those meeting or exceeding district objectives would be considered equal to or above their peers. One of the challenges of collecting data for long term outcomes is the mobility of families. This results in attrition of numbers of children remaining in the school district over time.

*Standardized Achievement Outcomes.* The long-term impact of an ECG program experience was evaluated by collecting mathematics and reading achievement scores for a sampling of children who attended Nebraska’s state-funded early childhood grant programs. Results for third and fourth grade students were aggregated from six programs. Seventy children who had attended an early childhood grant program were included in the sample. Of the seventy children included in this sample, 33% were identified as special education students. The assessments included the Stanford Achievement Test, Terra Nova, California Achievement Test, and Gray Oral Reading Test. Nearly 70% of ECG children were at the 50<sup>th</sup> percentile or greater (67% reading and 69% math).

Nearly 70% of ECG children were in the 50<sup>th</sup> percentile or greater group (67% reading and 69% math).

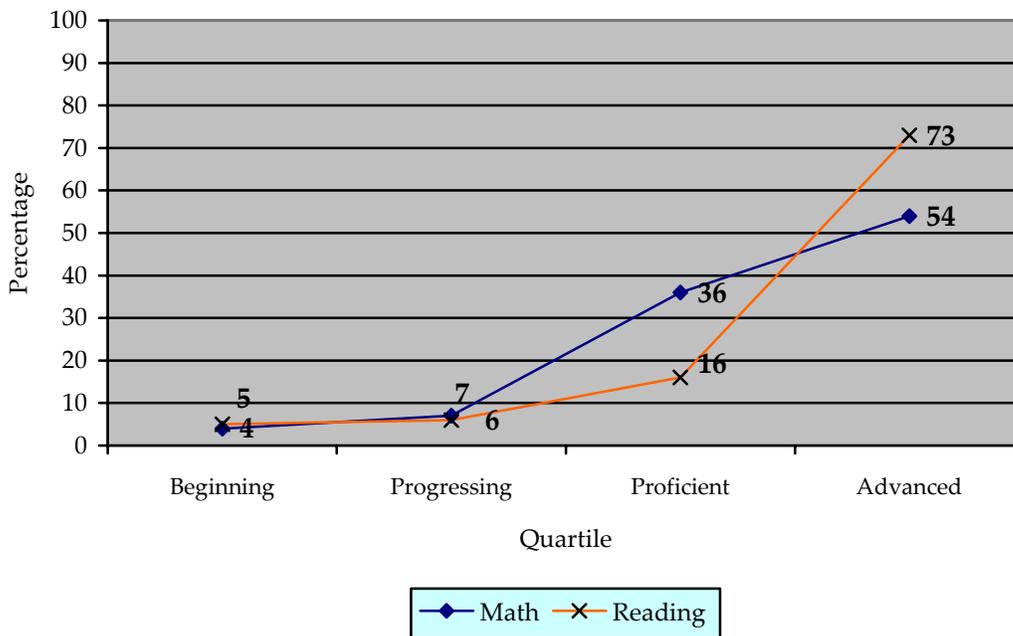
*Reading and Math Achievement Scores for ECG Children – 3<sup>rd</sup> and 4<sup>th</sup> Grades*



*Nebraska STARS Outcomes.* Three programs provided STARS outcome data for children who had an ECG program experience. There was an equal split among elementary and secondary students for the STARS reading scores, with 32 in 4<sup>th</sup> grade, 21 in 8<sup>th</sup> grade and 10 in 11<sup>th</sup> grade. A total of 56 student's scores were included for math scores, and 14 scores for writing. The reason for fewer included in writing is unknown. Given the small sample, writing scores are not displayed on the chart below. Ten percent of the children were identified as receiving special education for the reading scores, 4% for math, and 14% for writing. The majority of ECG children met or exceeded district standards in reading (89%) and math (90%).

The majority of ECG children met or exceeded district standards in reading (89%), writing (100%), and math.

*STARS Math and Reading Aggregate Scores for 4<sup>th</sup>, 8<sup>th</sup> & 11<sup>th</sup> Grade Students with ECG Experiences*



## Summary of Objective 2: Increasing Likelihood of School Success

The majority of young children served made substantial developmental gains. School-age children who have had an ECG program experience are performing well in later school years on standardized measures and on Nebraska STARS outcomes.

## Summary of Evaluation Findings

National studies have found that quality early childhood programs have been linked to immediate, positive developmental outcomes, as well as long-term positive academic performance. Quality early childhood environments are being provided through the Nebraska's Early Childhood Education Grant Program. This is reflected in good to excellent average ratings across programs on environment rating scales, classroom observations indicating a trend toward exemplary language and literacy practices, and more programs moving toward national accreditation of their programs.

In 2004-2005, Nebraska's Early Childhood Education Grant Program funded 27 programs. They served 1,068 young children and their families. Ninety-six percent of the funded programs met the first objective—ensuring high quality environments for early childhood education. The second objective focused on improving the likelihood of school success for children served in these programs. Developmental assessment data collected for 562 preschool children served in these programs revealed that more than 75% of preschool children made substantial gains in math/logic and language/literacy. Long-term outcomes included standardized achievement data and Nebraska STARS outcomes for school-age children who had previously been served in ECG programs. Nearly 70% of children who had an ECG program experience were at the 50<sup>th</sup> percentile or greater on standardized achievement testing in 3<sup>rd</sup> or 4<sup>th</sup> grade. The majority of the ECG children included in the sample with STARS data met or exceeded district standards in reading (89%), writing (100%), and mathematics (90%).

Clearly, the results of this evaluation indicate that Nebraska's investment in early childhood grant programs yielded quality programs for young children, as well as substantial developmental gains for the children being served and long-term academic gains for those who had been served in these programs.

Submitted by:  
Barbara Jackson, Ph.D. & Lisa St. Clair, M.S.  
Department of Education & Child Development  
Munroe-Meyer Institute  
University of Nebraska Medical Center



## References

- Brinkman, N., Barton, H., & Taylor, L. (2005). *High/Scope Child Observation Record for Preschoolers*. Ypsilanti, MI: High/Scope.
- Burchinal, M., Peisner-Feinberg, E., & Bryant, D. (et. al) (2000). Children's social and cognitive development and child-care quality: Testing for differential associations related to poverty, gender, or ethnicity. *Applied Development Science, 4*, 149-165.
- Dodge, D., Colker, L., & Heroman, C. (2005). *The Creative Curriculum Developmental Continuum Assessment Toolkit for Ages 3-5*. Washington, DC: Teaching Strategies, Inc.
- Harms, T., Clifford, R. & Cryer, D. (1998). *Early Childhood Environment Rating Scale, Revised Edition*. New York, NY: Teachers College Press.
- Harms, T., Cryer, D., & Clifford, R. (2004). *Infant/Toddler Environment Rating Scale, Revised Edition*. New York, NY: Teachers College Press.
- High/Scope Educational Research Foundation (2004). *High/Scope Child Observation Record for Preschoolers and for Infants/Toddlers*. Ypsilanti, MI: High/Scope.
- Meisels, S., Jablon, J., Marsden, D., Dichtelmiller, M., Dorfman, A., and Steele, D. (1995). *The Work Sampling System: An Overview*. Ann Arbor, MI: Rebus Planning Associates, Inc.
- Ramey, C. & Ramey, S. (1998). Early intervention and early experience. *American Psychologist, 58*, 109-120.
- Smith, Dickinson, Sangeorge & Anastasopulous (2002). *Early language and literacy classroom observation*. Newton, MA: Education Development Center, Inc.