

Nebraska Early Childhood Education Grant Program

Annual Evaluation Report - November 2004

July 1, 2003 - June 30, 2004



Purpose of Nebraska 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 involve collaboration with Head Start. LB 759, enacted in the 2001 Legislative Session, revised the Early Childhood Act originally passed in 1990 (79-1101 through 1104 R.R.S.) that enabled the funding of pilot Early Childhood Projects. The action to revise the law and to increase the funding was a part of Governor Johanns' early childhood initiative, *Children Can't Wait*. The purpose of Nebraska's Early Childhood Education Grant Program is to provide a high quality early childhood program setting and to assist children to reach their full potential and increase the likelihood of children's later success in school. Major emphases in LB759 (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.

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 early childhood programs target prekindergarten-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 as verified by a physician,
- 3) who reside in a home where a language other than spoken English is used as the primary means of communication, or
- 4) whose parents are younger than eighteen or who have not completed high school.

Each early childhood 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 so long as the Legislature appropriates funds and the programs are operated in accordance with requirements of the Nebraska Department of Education.

The initial Early Childhood Act of 1990 enabled the funding of ten pilot Early Childhood Projects with a total state allocation of \$560,000. At the time of the passage of LB759 in 2001, Governor Johanns identified an additional \$3,000,000 over the subsequent two years. Budget reductions to the Early Childhood Education Grant Fund were made in each of the subsequent Legislative Special and Regular Sessions, reducing the 2003-2004 total allocation to \$2,097,000 which currently funds 28 grants to local schools districts and Educational Service Units for operating early childhood programs. The Early Childhood Grant Program is administered by the Nebraska Department of Education.



Evaluation Purpose

The purpose of the Nebraska Early Childhood Education Grant 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 both qualitative and quantitative approaches. Table 1 describes the specific evaluation activities for each of the Nebraska Early Childhood 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 2003 - 2004 year of program implementation.

Table 1

Program Evaluation Plan for Nebraska Early Childhood Grant Program

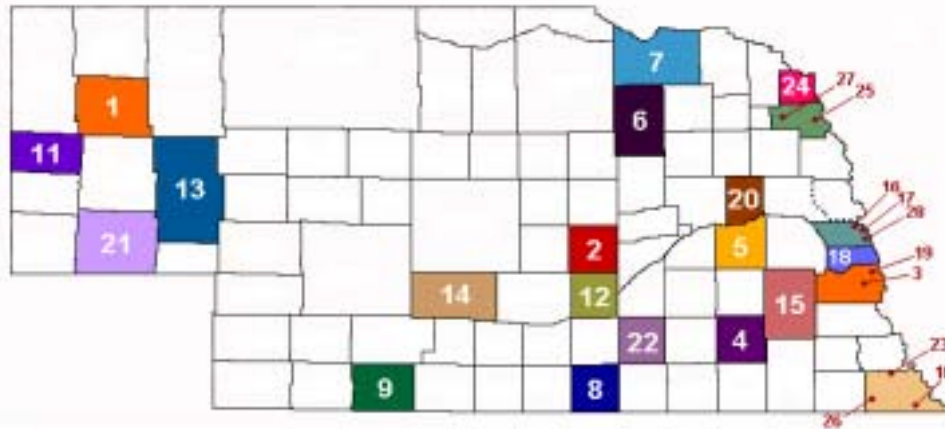
Objectives	Process Evaluation	Outcome Evaluation
<i>To provide a high quality early childhood program setting.</i>		Evaluation of the quality of the program using environment rating scales. Documentation of program accreditation.
<i>To assist children to reach their full potential and increase the likelihood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

Summary of Programs in Nebraska

Nebraska currently funds 28 early childhood programs from 28 districts or Educational Service Units across state. Programs and the number of years funded are listed in Table 2. Programs have been funded from two to twelve years.

Table 2 <i>Early Childhood Programs in Nebraska</i>	# of Years of Funding
Alliance Public Schools - Alliance's Early Childhood Program	2
Centura Public Schools - Bright Beginnings Preschool @ Cairo	8
Conestoga Public Schools - Cubs Preschool @ Murray	2
Crete Public Schools - CIRCLE	2
David City Public Schools - ABC Early Childhood Programs	2
Elgin Public Schools - Elgin Early Learning Center	2
ESU 1 - Growing Together Early Childhood Program @ Santee	2
ESU 9 - Webster County Early Learning Center	2
ESU15 - Partners in Parenting @ McCook	8
Falls City Public Schools - Parent-Child Center	12
Gering Public Schools - Project Success	12
Grand Island Public Schools - Gold Star Preschool Program	2
Lewellen Public Schools - Early Childhood Education-Garden County	2
Lexington Public Schools - Lexington Early Learning Center	2
Lincoln Public Schools - ExCITE	2
Millard Public Schools - Early Start Preschool Program	8
Omaha Public Schools - Educare Center of Omaha, Inc.	2
Papillion LaVista Public Schools - Growing Together	2
Plattsmouth Community Schools - Success Now	2
Schuyler Grade School - Early Learning Center	7
Sidney Public Schools - Early Childhood Learning Center	2
South Central Unified System #5 - Clay County Learning Center for Children	8
Southeast Consolidated Schools - Mustang Preschool @ Stella	2
South Sioux City Community Schools - Siouxland Family Center @ Dakota City	2
Umon'hon' Nation Public Schools - Shin'ga Zhin'ga Child Development Center @ Macy	7
Unified School System #2007 - HTRS Early Childhood Education Center @ Humboldt	2
Walthill Public Schools - Wazhingha Ti Zhingha Early Childhood Center	2
Westside Community Schools - LEAP-66	2

NEBRASKA EARLY CHILDHOOD PROGRAMS



- | | |
|---|--|
| <p>1. Alliance Public Schools -
Alliance Early Childhood Program</p> <p>2. Centura Public Schools -
Bright Beginnings Preschool @ Cairo</p> <p>3. Conestoga Public Schools -
Cubs Preschool @ Murray</p> <p>4. Crete Public Schools -
CIRCLE</p> <p>5. David City Public Schools -
ABC Early Childhood Programs</p> <p>6. Elgin Public Schools -
Elgin Early Learning Center</p> <p>7. ESU#1 -
Growing Together Early Childhood Program @ Santee</p> <p>8. ESU#9 -
Webster County Early Learning Center</p> <p>9. ESU#15 -
Kidz Zone/Partners in Parenting @ McCook</p> <p>10. Falls City Public Schools -
Parent-Child Center</p> <p>11. Gering Public Schools -
Project Success</p> <p>12. Grand Island Public Schools -
Gold Star Preschool Program</p> <p>13. Lewellen Public Schools -
Early Childhood Education-Garden County</p> <p>14. Lexington Public Schools -
Lexington Early Learning Center</p> | <p>15. Lincoln Public Schools -
ExCITE</p> <p>16. Millard Public Schools -
Early Start Preschool Program</p> <p>17. Omaha Public Schools -
Educare Center of Omaha, Inc.</p> <p>18. Papillion LaVista Public Schools -
Growing Together</p> <p>19. Plattsmouth Community Schools -
Success Now</p> <p>20. Schuyler Grade School -
Early Learning Center</p> <p>21. Sidney Public Schools -
Early Childhood Learning Center</p> <p>22. South Central Unified System #5 -
Clay County Learning Center for Children</p> <p>23. Southeast Consolidated Schools -
Mustang Preschool @ Stella</p> <p>24. South Sioux City Community Schools -
Siouxland Family Center @ Dakota City</p> <p>25. Umon'hon' Nation Public Schools -
Shin'ga Zhin'ga Child Development Center @ Macy</p> <p>26. Unified School System #2007 -
HTRS Early Childhood Education Center @ Humboldt</p> <p>27. Walthill Public Schools -
Wazhinga Ti Zhingga Early Childhood Center</p> <p>28. Westside Community Schools -
LEAP-66</p> |
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Report of Children Enrolled

In 2003-04, a total of 1,357 children were served across 28 programs (compared to 1,098 served in 2002-03). Typical classroom size included 16-20 children. The majority of these programs serve preschool children and their families. Four-year-old children are the largest group represented, followed by three-year-olds. Fewer are served in the younger groups (see Figure 1). The single largest group was White not Hispanic, followed by Hispanic. Ethnic distribution is summarized in Figure 2.

Figure 1
Report of Children Enrolled – By Age

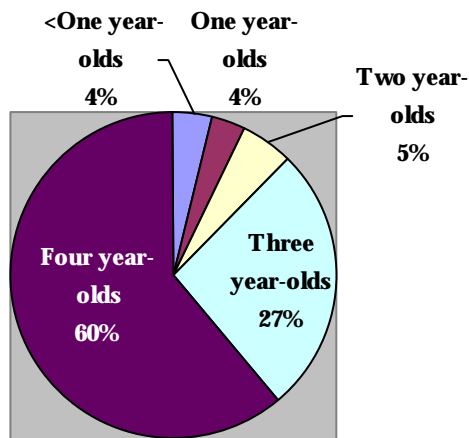
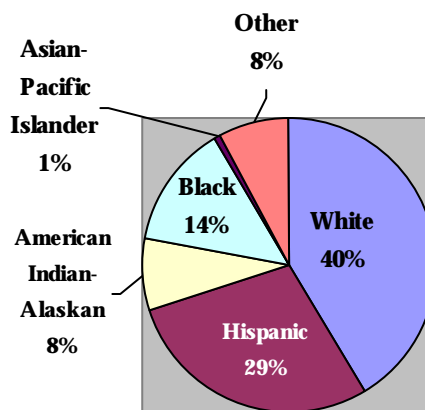
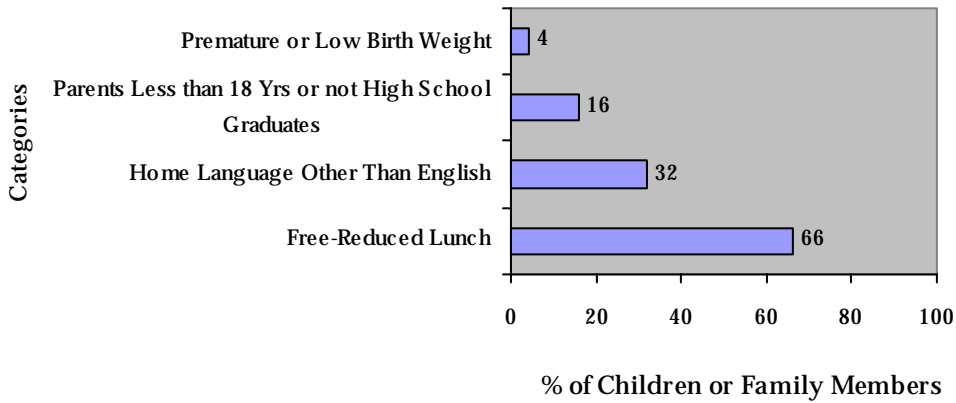


Figure 2
Report of Children Enrolled – By Ethnicity



The early childhood 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 (4%) who were premature or low birth weight. Many children (32%) had a home language other than English. Some children (16%) had parents who were less than 18 years of age or were not high school graduates. These data are summarized in Figure 3.

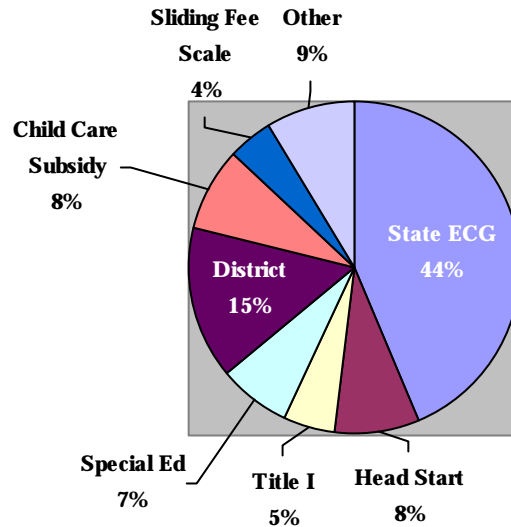
Figure 3
Demographic Data of Children and Families Served



Funding for Children Enrolled

Programs reported funding for the 1,357 children they served. It should be noted that these data represent a duplicated count, as some children are served through more than one funding source. Overall, the majority of children were served through State Early Childhood Grant and District funds. Less frequently identified funding sources included: Head Start, Special Education funds, Sliding Fee Scales, Child Care Subsidies, and Title I funds. Figure 4 demonstrates the percentage funded by category.

Figure 4
Funding Sources Supporting Enrolled Children



Program Evaluation Findings

Objective 1: To provide a high quality early childhood program setting.

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 status were used to evaluate the quality of early childhood programs for this grant.

Environment Rating Measures

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, 2003), the Early Childhood Environment Ratings Scale-Revised (ECERS-R) (Harms, Clifford & Cryer, 1998), the High/Scope Program Quality Assessment (PQA) (High/Scope Press, 1998), or the Early Language and Literacy Classroom Observation (ELLCO) (Smith, Dickinson, Sangeorge & Anastasopoulos, 2002). The Nebraska Department of Education expects early childhood programs to achieve a rating of 5 or higher overall for the ITERS-R or ECERS-R, 4 or higher for the PQA, and 67% of possible total score 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 at a sample classroom for each program.

ECERS/ITERS

In order to monitor the quality of the programs, the ITERS-R and ECERS-R were completed in the Fall 2003 and Spring 2004. These ratings are compared to baseline information that was obtained during the 2002-2003 school year. The ratings are based on a 7 point rating scale with 1 = inadequate and 7 = excellent. Evaluators across Nebraska were trained on these scales. Inter-rater reliability was established through annual training/rating jointly conducted by Nebraska Department of Education, Office of Early Childhood, and the Early Childhood Training Center. Figure 5 lists overall scores on the ITERS (6 classrooms observed) and Figure 6 for the ECERS (21 classrooms observed).

Figure 5
ITERS Across Time

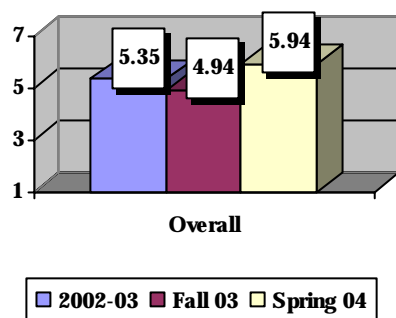
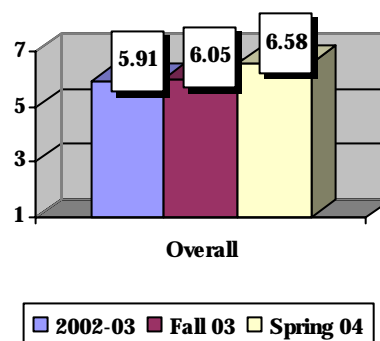


Figure 6
ECERS Across Time



In terms of overall scores, programs improved from the 2002-2003 baseline scores to the spring of 2004 (the same is true of a comparison of fall to spring). On the ECERS or ITERS, 96% of classrooms observed met the state indicator of quality in the spring.

Table 3 lists sub-scores rated on the ITERS-R (6 classrooms) in the Spring 2004. Average scores are listed first, followed by the range of scores across the classrooms that were observed.



Table 3
Spring ITERS-R Scores

	Space & Furnishings	Personal Care Routines	Listening & Talking	Learning Activities	Interaction	Program Structure	Parents & Staff	Overall Rating
Avg	5.40	5.28	6.65	5.61	6.67	6.72	6.06	5.94
Range	4.40-6.20	3.17-7.00	5.33-7.00	3.90-6.07	6.00-7.00	6.00-7.00	3.71-7.00	4.37-6.54
<i>1 = inadequate 3 = minimal 5 = good 7 = excellent</i>								

Average ratings across all areas were 5.00 or greater in the infant/toddler classrooms observed. Higher ratings across programs (average rating of 6.00 or greater) include listening/talking, interaction, program structure, and parents/staff. The most variability (as reflected in the range of scores) across the classrooms for the infant/toddler programs was in the areas of personal care routines (range of 3.17-7.00) and learning activities with children (range of 3.90 to 6.07). The overall rating across programs of 5.94 is higher than ratings for infant/toddler center-based care in Nebraska in last year's evaluation (5.35) and

the Midwest Child Care Research Consortium, 4.51 (2003). One of the infant/toddler programs did not meet the state indicator of quality. These results indicate that the majority are providing high quality programs for children.

Table 4 lists sub-scores rated on the ECERS-R (21 classrooms) in the spring (2004). Average scores are listed first, followed by the range of scores across the classrooms that were observed.

Table 4
Spring ECERS-R Scores

	Space & Furnishings	Personal Care Routines	Language-Reasoning	Learning Activities	Interaction	Program Structure	Parents & Staff	Overall Rating
Avg	6.53	6.69	6.61	6.29	6.92	6.89	6.55	6.58
Range	5.38-7.00	6.00-7.00	5.25-7.00	4.30-7.00	6.20-7.00	6.25-7.00	5.83-7.00	5.95-7.00
<i>1 = inadequate 3 = minimal 5 = good 7 = excellent</i>								

Average ratings across all areas were 6.00 or greater in the preschool classrooms observed. Therefore, all were areas of strength when analyzing across programs. However, there was some variability across individual classrooms observed, as reflected in the range of scores. For example, learning activities ranged from 4.30 to 7.00. The overall rating of 6.53 is higher than ratings for preschool center-based care in Nebraska in last year's evaluation report (5.91) and the Midwest Child Care Research Consortium, 4.38 (2003). All programs (100%) met the state standards for quality. These results indicate that these programs are providing high quality programs for children.

PQA

Three programs utilized the High/Scope Program Quality Assessment (PQA, 1998) to evaluate their classroom programs. The PQA is organized into seven sections (see Table 5) that cover essential areas in evaluating the quality of early childhood programs. The PQA is based on a 5 point rating scale with 1=low quality and 5=high quality. Table 5 lists scores rated on the PQA in the spring (3 classrooms).

Table 5

Program Quality Assessment Scores

	Learning Environment	Daily Routine	Adult Child Interaction	Curriculum Planning & Assessment	Parent Involvement - Family Services	Staff Qualifications & Development	Program Management	Overall Rating
Avg	4.95	4.99	4.89	4.96	Not rated			4.94
Range	4.90-5.00	4.97-5.00	4.80-5.00	4.87-5.00	Not rated			4.90-5.00
<i>1=low quality 5=high quality</i>								

All areas were strengths (average rating of 4 or greater); therefore, all classrooms met the state indicator of quality (4 or higher rating). This indicates all classrooms observed with the PQA were of high quality.

ELLCO

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 objective ratings of the quality of the language and literacy environment of the classroom); and the Literacy Activities Rating Scale (summarizes information on the nature and duration of observed literacy activities). A total of 24 preschool classrooms were observed.

Literacy Environment Checklist - ELLCO

The Literacy Environment Checklist portion 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. Table 6 lists the average scores and the range of scores obtained on this checklist across programs.

Table 6

Summary Scores on ELLCO

	Literacy Environment Checklist (Max of 41)	Classroom Observation (Max of 70)	Literacy Activities Rating Scale (Max of 13)
Average	36.3	64	10
Range	23-41	48-70	6-13

Of the 24 classrooms observed in the spring, all but one (96%) met the state established standards for quality (minimum score of 27).

Classroom Observation - ELLCO

The next section of the ELLCO--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. Results are summarized in Table 6. All classrooms observed met the state established standards for quality (minimum score of 47).

Literacy Activities Rating Scale - ELLCO

The Literacy Activities Rating Scale (LARS) focuses on reading and writing activities observed in classrooms. A maximum score of 13 is possible. Categories include: Book Reading (maximum of 8)--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—and writing (maximum of 5)--observe children writing in their play, see children attempting to write letters or words, helping children write, and adult modeling writing.

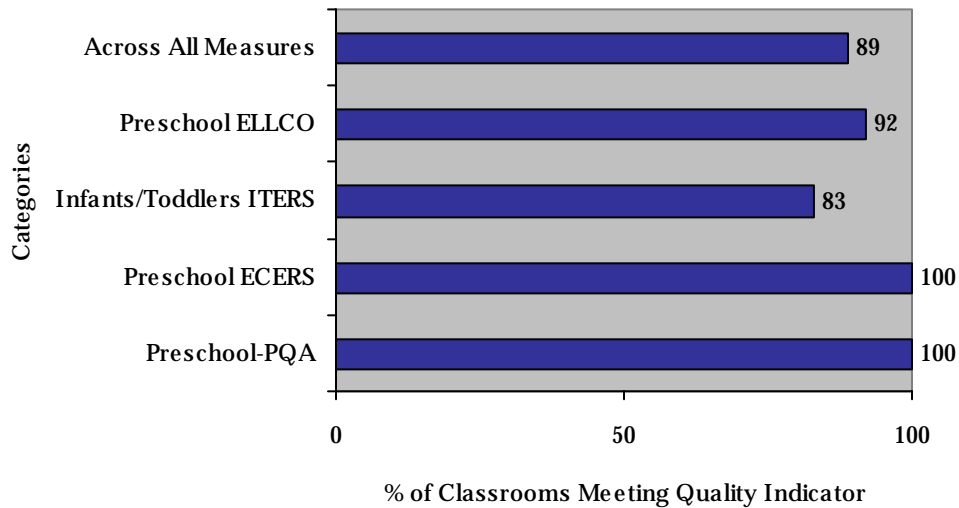
To achieve the state indicator of quality standard, programs must score at least an eight or higher on the LARS. The results are summarized in Table 6. Ninety-six per cent of the programs met the minimum standard.

State Quality Indicators

Eighty-nine percent of early childhood classrooms evaluated this year met or were above the state established indicators of quality across all environment rating measures (these findings are summarized in Figure 7). It appears a greater proportion of classrooms serving infants/toddlers had difficulty meeting state indicators. Overall, these results suggest that quality early childhood programs are available for children who participate in the majority of state funded Nebraska early childhood programs.

Figure 7

Percentage of Classrooms achieving the State Indicator of Quality



National Accreditation

Programs are required to achieve accreditation by the National Association for the Education of Young Children (NAEYC) within the first three years of operation and to maintain accreditation thereafter. Reporting by programs indicates 6 programs are accredited or awaiting outcomes of recent accreditation visits, 19 are in the self-study phase, and 3 have not yet begun the self-study process. Of those currently in the self-study phase, 7 expect validation visits in 2004-2005.

Objective 2: To assist children to reach their full potential and increase the likelihood of children's later success in school.

Both short-term and long-term developmental outcomes were assessed to determine the extent that children's development was impacted by participation in the program. Programs used one of several assessments to evaluate child outcomes, including: High/Scope Child Observation Record (COR) for Infants and Toddlers (2003) or Preschoolers (Brinkman, N., Barton, H., and Taylor, L, 2004), Work Sampling (Meisels, et al, 1995), or Creative Curriculum (Dodge, et al, 2004). The data for short-term outcomes represents children who had both fall-spring assessment and therefore is a sample of the total number of children served. To the extent possible, long-term outcomes were evaluated for those children who remained within the same school district. These analyses were based on students' kindergarten through 7th grade math and reading scores on standardized achievement tests used by local school districts.

Summary of Short-Term Developmental Outcomes

Child Observation Record. Developmental skills of preschool children were monitored through the use of the High/Scope Child Observation Record (COR). Twenty programs provided detailed Preschool COR data and four programs provided detailed Infant/Toddler COR data. An analysis of the Spring 2004 average group scores across programs serving *preschool children* are summarized in Figure 8. Maximum skills were achieved in the areas of Initiative, Social Relations, and Music & Movement, followed closely by Creative Representations. Relatively fewer skills were achieved in Language & Literacy and Math/Logic.

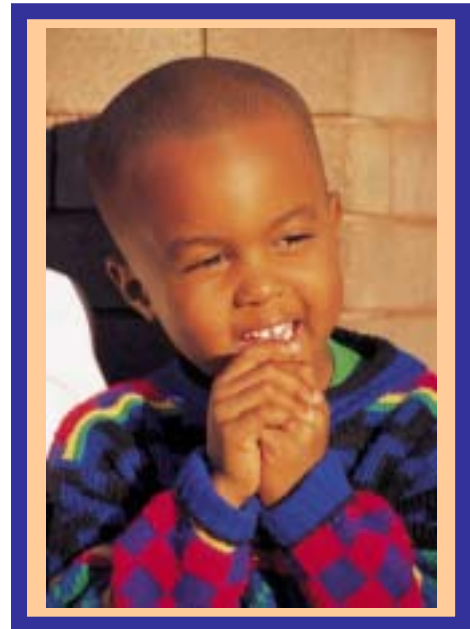
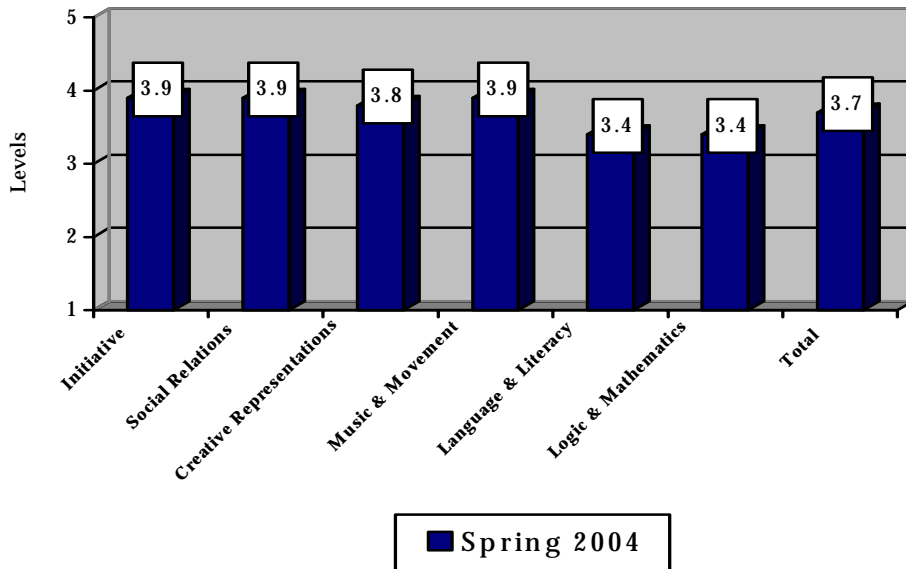


Figure 8
Preschool COR Spring Outcomes



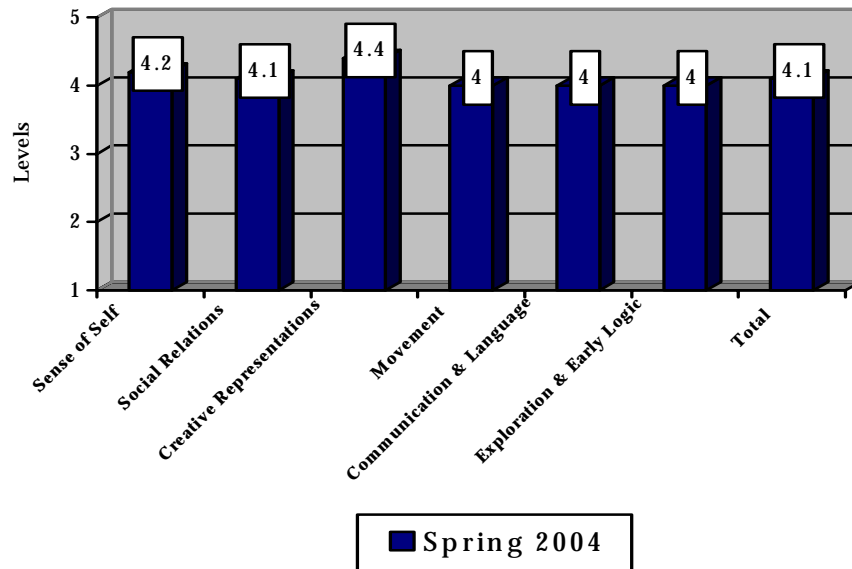
In addition to examining the group COR data across the classrooms, individual children’s data was reported in two areas, literacy and logic and mathematics. Results for the preschool children are summarized in Table 7. These data represent information from 20 programs serving preschool children. The COR scores are analyzed based on the number of children meeting state-established standards (a gain of .4 or higher) in literacy related areas (e.g., math and language). The majority of the children met the criteria in math and language and literacy, suggesting the programs were effectively supporting children’s development in these two areas.

Table 7
Child Outcomes on COR

PRESCHOOL		
Number of Children Assessed Fall and Spring	Percentage Increasing .4 or greater on Language and Literacy	Percentage Increasing .4 or greater on Logic and Mathematics
591	80%	83%

Four programs provided detailed Infant/Toddler COR data. An analysis of the Spring 2004 average scores across programs serving infant/toddler children (Figure 9) suggested a relative even profile of growth across domains with Creative Representations as a strength area. All areas were rated at 4 or higher.

Figure 9
Infant/Toddler COR Spring Outcomes



In addition to examining the group COR data across the four classrooms, individual infant/toddler data was reported in two areas, communication and exploration and logic. Results of the outcome data for the infants and toddlers are summarized in Table 8. These data represent information from four programs. The COR scores are analyzed based on the number of children meeting state-established standards (a gain of .8 or higher) in these literacy related areas. The majority of the children met the criteria in both areas with greater numbers reaching the standard in communication than in the area of exploration and logic.

Table 8
Child Outcomes on COR

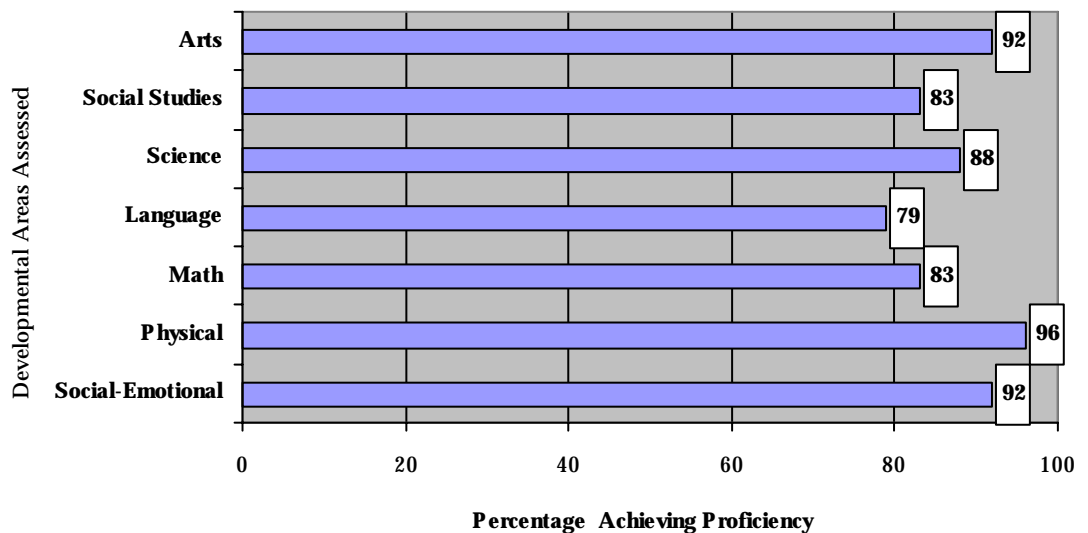
INFANTS & TODDLERS		
Number of Children Assessed Fall and Spring	Percentage Increasing .8 or greater on Communication	Percentage Increasing .8 or greater on Exploration and Logic
41	73%	61%

Work Sampling. Developmental skills of preschool children were monitored through the use of the Work Sampling. Group analysis of child outcomes suggests that maximum skills were achieved in areas of physical, arts, and social-emotional. Fewer skills were achieved in language and math (Figure 10).



Figure 10

Children who scored as proficient as assessed by Work Sampling



Results of the individual child gains were reported in two areas, language-literacy and mathematical thinking. Results are summarized in Table 9. These data represent information from one (1) program including both fall-spring assessments. The state standard was set at children increasing one level or more. The results indicate that all children met the state standards.

Table 9

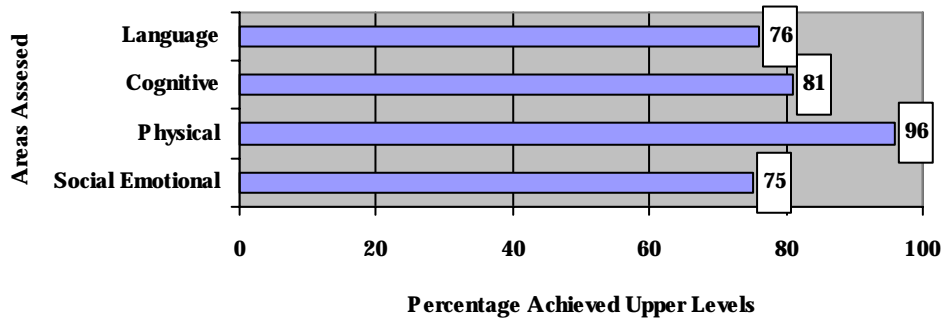
Child Outcomes on Work Sampling

PRESCHOOL		
Number of Children Assessed Fall and Spring	Percentage Increasing 1 Level or More on Language-Literacy	Percentage Increasing 1 Level or More on Mathematical Thinking
26	100%	100%

Creative Curriculum. Developmental skills of preschool children were monitored by three programs through the use of the Creative Curriculum. Children are rated on each developmental landmark based on a sequential rating with forerunners describing prerequisite skills to those described at the Step III level. For example in the area of logical thinking, the forerunner would be “matches like shapes” and Step III behavior was “sorts objects into groups/subgroups and can state reason.” Figure 11 provides a summary of a group analysis of the percentage of children who scored in the top two levels of skills on Creative Curriculum. Maximum skills were achieved in the area of physical development, followed by cognitive. Fewer skills were achieved in the assessed areas of language and social-emotional development.

Figure 11

Children who achieved the top two levels of skills on Creative Curriculum



In addition to examining group data across the classrooms, individual child data was reported in two areas, language-literacy and cognitive. These data are summarized in Table 10. Developmental skills of preschool children in three programs monitored from fall to spring through the use of *Creative Curriculum* found that the majority of the children in both age groups were demonstrating skills that were representative of the upper two levels of the assessment. There was a large increase of children who moved to this level of skill compared to baseline scores in the fall.

Table 10

Child Outcomes on Creative Curriculum

PRESCHOOL - Age 3				
Number of Children Assessed Fall and Spring	Percentage of Children Achieving Upper 2 of 4 Levels of Skills in Language-Literacy		Percentage of Children Achieving Upper 2 of 4 Levels of Skills in Cognitive Skills	
	Fall	Spring	Fall	Spring
Total # of Children: 42	7	69	7	69
PRESCHOOL - Age 4				
Number of Children Assessed Fall and Spring	Percentage of Children Achieving Upper 2 of 4 Levels of Skills in Language-Literacy		Percentage of Children Achieving Upper 2 of 4 Levels of Skills in Cognitive Skills	
	Fall	Spring	Fall	Spring
Total # of Children: 80	55	95	59	98

Summary of Short-Term Outcomes. In summary, the short-term outcomes of early childhood programs are positive. In language and literacy outcomes, 73-100% of children who were assessed in the spring met state indicators of achievement for this program. In math, 61-100% likewise met or exceeded state indicators. When group scores were summarized, a pattern emerged that suggested that outcomes for preschool children appeared to be slightly lower in the areas of language and math. As a group, programs should examine why language/literacy and math/logic areas, while positively rated, are the lower areas.

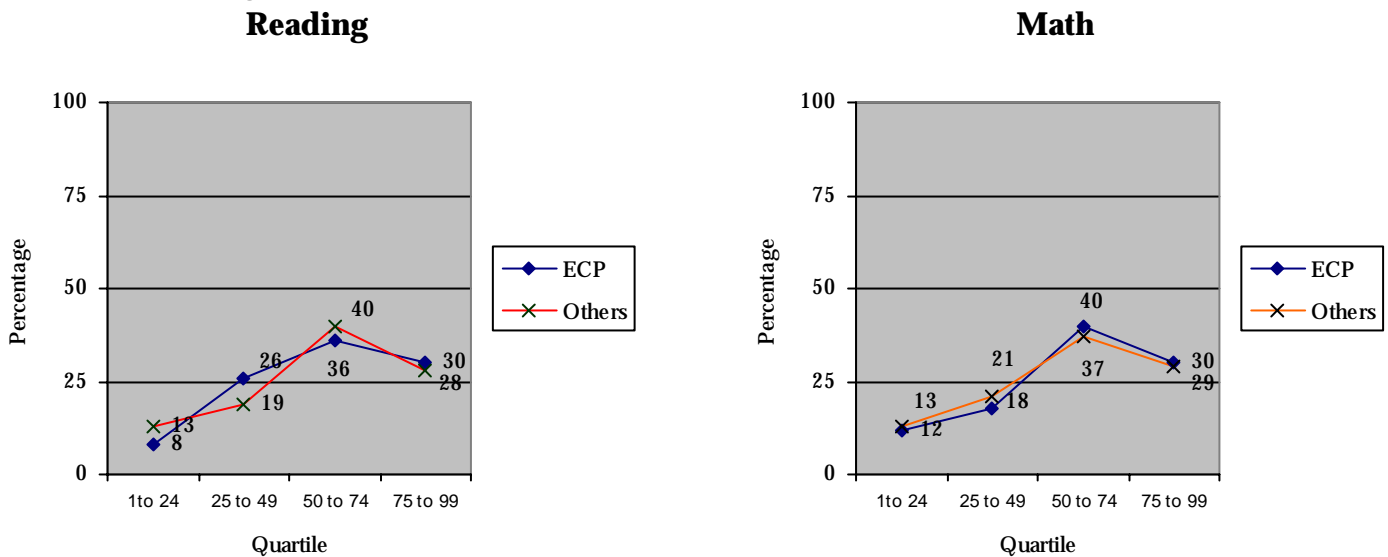
Long-Term Outcomes of Early Childhood Programs

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 with 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. One of the challenges of collecting data for long term outcomes is the mobility of families which results in attrition of numbers of children remaining in the school district over time.

The long-term impact of an Early Childhood Program experience was evaluated by comparing achievement scores on reading and math (as available) for children who attended Nebraska’s state-funded early childhood programs and their school peers. Seven programs submitted 13 sets of long-term outcome data (1-kindergarten, 1- second grade, 2 - third grade, 5 - fourth grade, 2 - fifth grade, 1- sixth grade, and 1- seventh grade). A total of 159 ECP children were compared to 443 others (reading) and 145 ECP children to 423 others (math).

First, results from an overall perspective (all 13 sets of data analyzed together) will be addressed in Figure 12. Outcomes for fourth grade students will be discussed later, as it has the largest group of data.

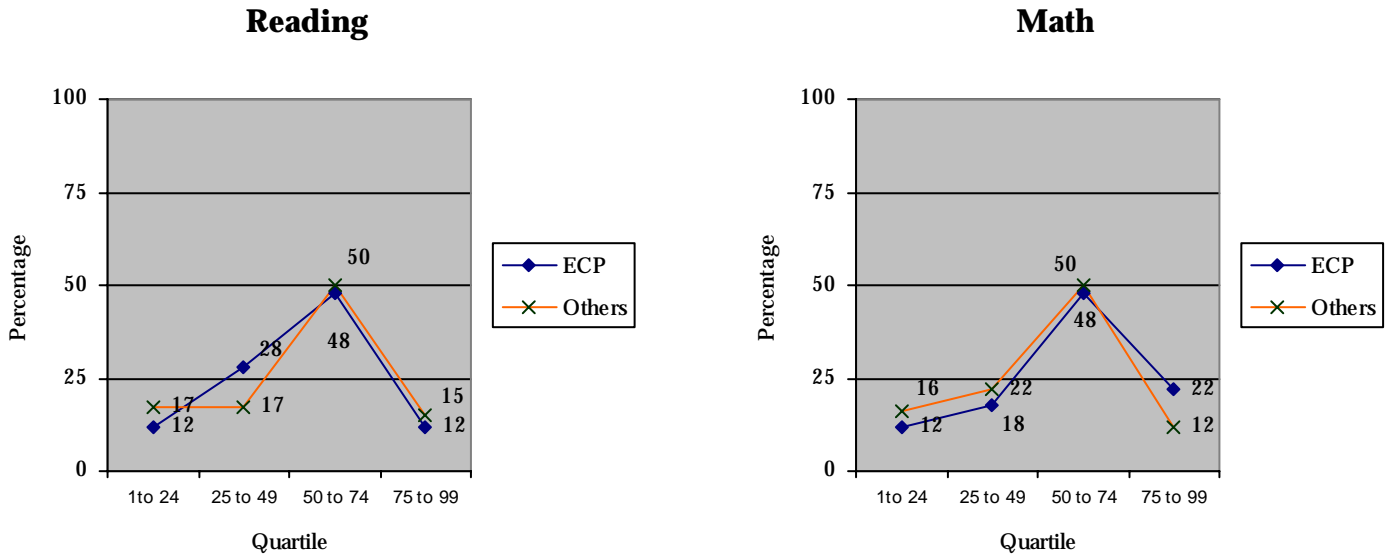
Figure 12
Overall Long-Term Outcomes for Children Across All Grade Levels



Long-term outcomes in reading and math were very similar for ECP and other children (Figure 13). In reading, 66% (106 of 159) of early childhood program children scored in the 50th percentile or greater category compared to 68% (301 of 443) of the others. In math, 70% (101 of 145) of early childhood program children scored in the 50th percentile or greater category compared to 66% (280 of 423) of the others.

Fourth grade was the only grade level to contain more than two sets of data. Five programs submitted fourth grade data (Figure 13). For that reason, only fourth grade student outcomes will be compared.

Figure 13
Outcomes for 4th Grade Children

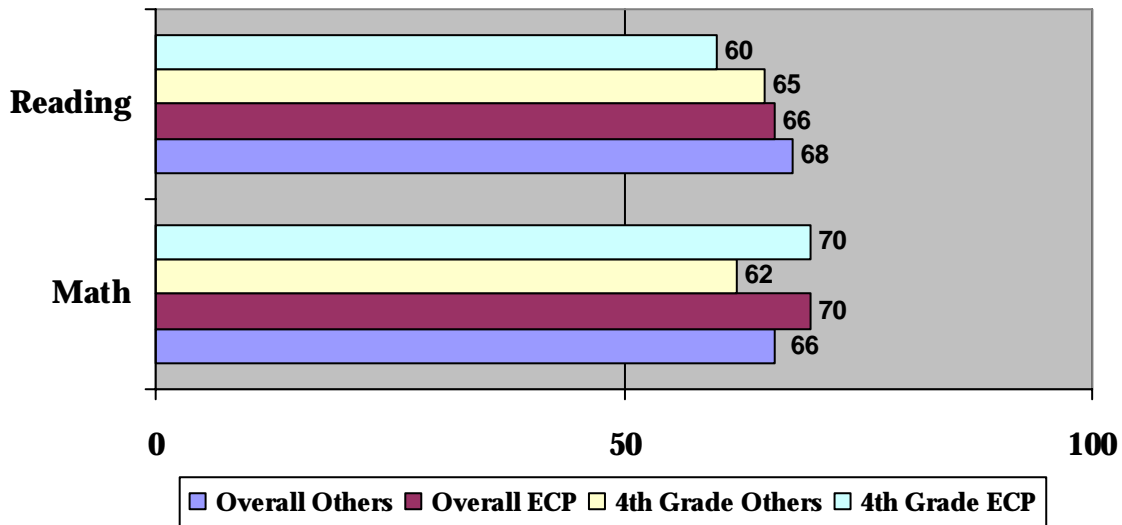


In fourth grade, 40 students were in the ECP group and 163 were in the peer group for reading and 164 for math (across five school districts). Sixty percent of ECP children were in the top 50th percentile in reading compared to 65% for others. Seventy percent of ECP children were in the top 50th percentile in math compared to 62% for others.



As a summary of the long-term outcome results reported in the preceding section, the following bar graph (Figure 14) compares the percent of ECP and other students who scored in the top 50th percentile in math and reading across all groups.

Figure 14
Percentage of Students in Top 50th Percentile by Subject, Overall and Fourth Grade



As can be seen, the range of scores is small (62-70 in math and 60-68 in reading). In general, it appears ECP children scored slightly better than their peers in math, whereas the opposite is true in reading.

Overall, these results indicated that the ECP children and their comparison peers demonstrated similar reading and math outcomes. Based on the assumption that the ECP group consisted of more children who were from low socio-economic status and therefore were more “at-risk” than the peer group to which they are compared, the closer their scores are to the peer group, the better. However, there are some limitations to consider when interpreting the significance of the long-term outcome data. First, most of the state-funded early childhood programs were less than three years old; therefore, long-term outcome data were only available from a small number of previously funded pilot projects. Second, projects submitted group aggregate data only, limiting analysis. Third, projects took different approaches in identifying their peer populations. A small number of projects submitted peer group data that included a matched sample with respect to demographic characteristics. For most projects, the peer group comparisons represented all of the other children served in that school or district

at similar grade-levels. This group of peers typically was dissimilar to the ECP children, overall representing children with higher socio-economic status. Finally, the role of early childhood experiences on the peer group cannot be factored in as this group of children's participation in community early childhood programs is unknown. Refinement of long-term data collection is needed to better ascertain the long-term benefit of participation in early childhood programs.

Summary

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 average ratings across programs on environmental rating scales ranging from good to excellent, literacy rating scales indicating a trend toward exemplary literacy practices, and more programs moving toward national accreditation of their programs.



Nebraska's Early Childhood Education Grant Program has funded 28 programs to serve over 1,300 at-risk young children and their families. Nebraska's children are achieving positive short-term pre-academic outcomes. In language and literacy outcomes, 73-100% of children who were assessed fall and spring met the state indicators of achievement. In math, 61-100% likewise met the state indicators. Preliminary data suggests that long-term outcomes are promising in the area of math, in which ECP children out-performed their peers. In contrast, ECP children scored slightly less in reading than their peers. Continued collection of data is necessary to further evaluate the long-term impact of children's academic achievement. The results of this evaluation indicate that Nebraska's investment in early childhood programs has yielded quality programming and short-term positive pre-academic outcomes for young children being served in these programs.

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