

Nebraska Early Childhood Education Grant Program Evaluation Progress Report

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Submitted by

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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 2002 - 2003 year of program implementation.

Table 1: Program Evaluation Plan for Nebraska Early Childhood Grant Program

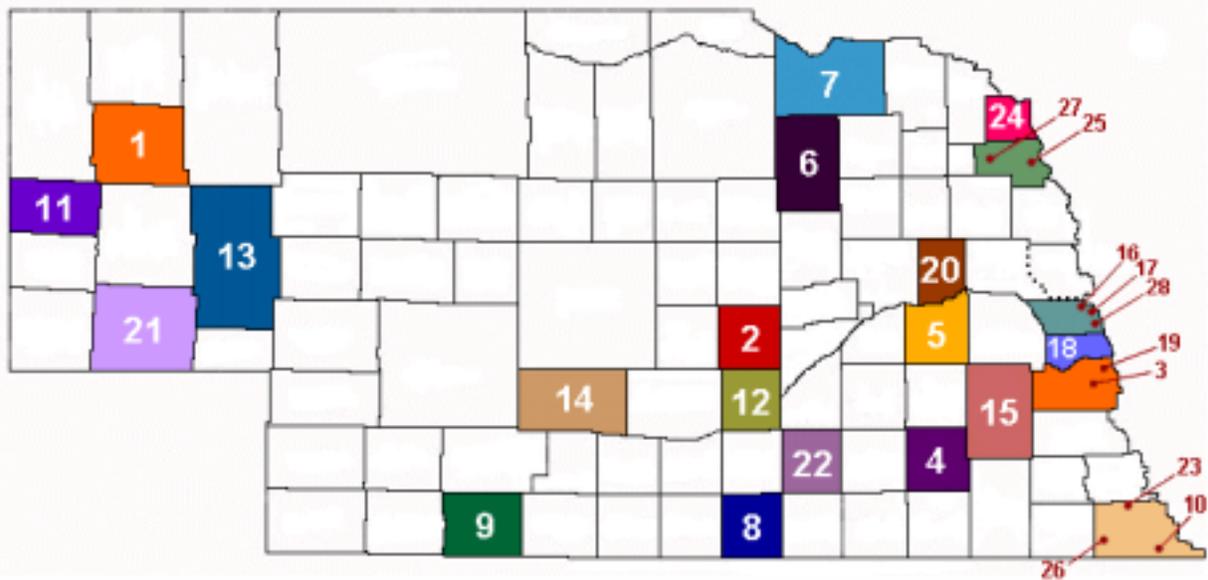
Objectives	Process Evaluation	Outcome Evaluation
<i>To provide a high quality early childhood program setting.</i>		Evaluation of the quality of the program using environment rating scales. Documentation of program accreditation.
<i>To assist children to reach their full potential and increase the likelihood 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 across Nebraska. Programs and the number of years funded are listed in Table 2. Programs have been funded from one to eleven years.

Table 2: Early Childhood Programs in Nebraska	# of Years of Funding
Alliance Public Schools – Alliance Early Childhood Program	1
Centura Public Schools - Bright Beginnings Preschool @ Cairo	7
Conestoga Public Schools - Cubs Preschool @ Murray	1
Crete Public Schools – CIRCLE	1
David City Public Schools - ABC Early Childhood Programs	1
Elgin Public Schools - Elgin Early Learning Center	1
ESU 1 - Growing Together Early Childhood Program @ Santee	1
ESU 9 - Webster County Early Learning Centers	1
ESU15 – Kidz Zone/Partners in Parenting @ McCook	7
Falls City Public Schools – Parent-Child Center	11
Gering Public Schools - Project Success	11
Grand Island Public Schools - Gold Star Preschool Program	1
Lewellen Grade School - Early Childhood Education-Garden County	1
Lexington Public Schools - Lexington Early Learning Center	1
Lincoln Public Schools – ExCITE	1
Millard Public Schools - Early Start Preschool Program	7
Omaha Public Schools - Educare Center of Omaha, Inc.	1
Papillion LaVista Public Schools – Growing Together	1
Plattsmouth Community Schools - Success Now	1
Schuyler Grade School - Early Learning Center	6
Sidney Public Schools – Early Childhood Learning Center	1
South Central Unified System #5 - Clay County Learning Centers for Children	7
Southeast Consolidated Schools - Mustang Preschool @ Stella	1
South Sioux City Community Schools - Siouxdland Family Center @ Dakota City	1
Umon'hon' Nation Public Schools - Shin'ga Zhin'ga Child Development Center @ Macy	6
Unified School System #2007 - HTRS Early Childhood Education Center @ Humboldt	1
Walthill Public Schools - Wazhingia Ti Zhingia Early Childhood Center	1
Westside Community Schools - LEAP-66	1

NEBRASKA EARLY CHILDHOOD PROGRAMS



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

Report of Children Enrolled

In 2002-03, a total of 1,098 children were served across 28 programs. Typical classroom size included 16-20 children. The majority of the programs served 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).

Total ethnicity was reported for 1,102 children indicating that some programs reported two ethnicities for a child when that child was bi- or multi-racial. 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

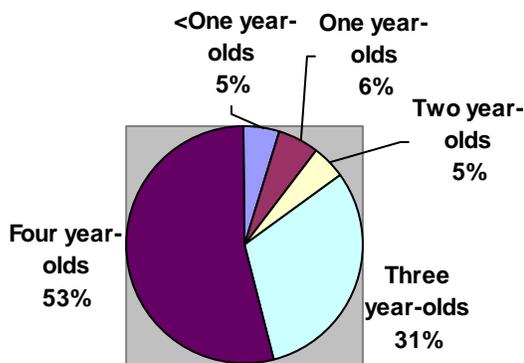
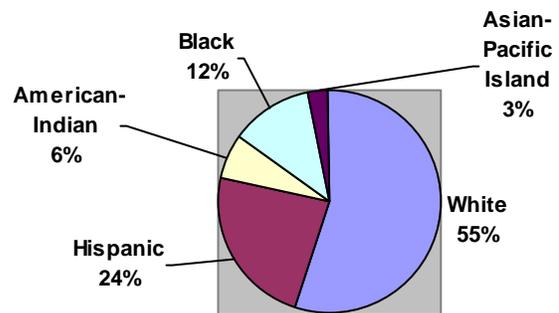
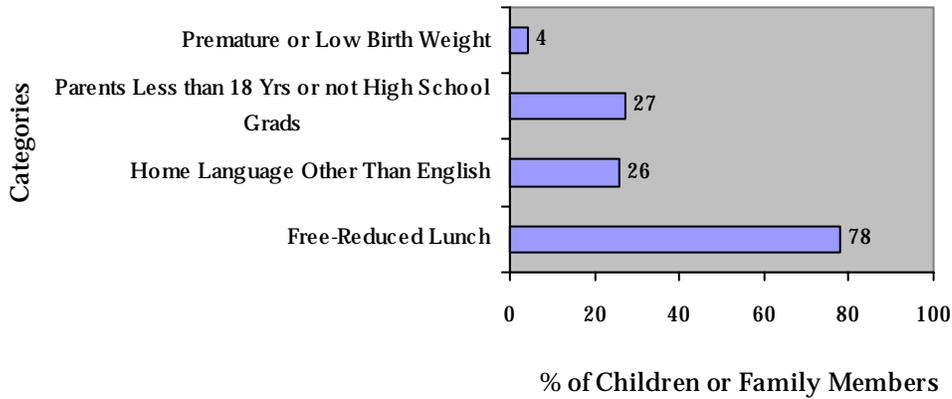


Figure 2
Report of Children Enrolled – By Ethnicity



The early childhood programs served primarily children who were low-income, as was reflected by the 78 percent 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 (although five programs indicated they did not track this data). Many children (26%) had a home language other than English and had parents (27%) who were less than 18 years of age or were not high school graduates. These data are summarized in Figure 3.

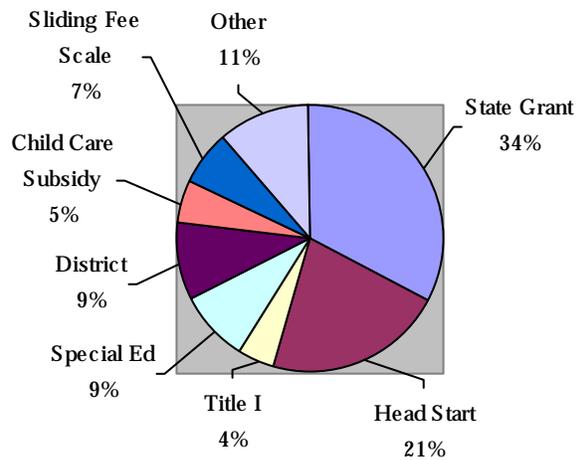
Figure 3:
Demographic Data of Children and Families Served



Funding for Children Enrolled

Programs reported funding for the 1,098 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 federal Head Start funds. Less frequently identified funding sources included: District funds, Special Education funds, Sliding Fee Scale, Child Care Subsidy, Title I funds, and other sources. Figure 4 demonstrates the percentage funded by category.

Figure 4:
Funding Sources Supporting Enrolled Children



Program Evaluation Findings

Quality Environments for Infant, Toddler and Preschool Children

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 available to programs including the Infant/Toddler Environment Ratings Scale-Revised (ITERS-R) (Harms, Clifford & Cryer, 2003), the Early Childhood Environment Ratings Scale-Revised (ECERS-R) (Harms, Clifford & Cryer, 1998) or High/Scope Program Quality Assessment (PQA) (High/Scope Press, 1998). Baseline information was obtained by evaluators completing one of these observational environment rating scales in a sampling of classrooms at each program.

The Nebraska Department of Education expects early childhood programs to achieve an overall rating of 5 or higher for the ITERS-R or ECERS-R or 4 or higher for the PQA. This expectation is referred to as the state indicator of quality.

The ITERS-R and ECERS-R are based on a 7 point rating scale with 1 = inadequate and 7 = excellent. Table 3 lists scores rated on the ITERS-R (4 classrooms). Table 4 lists scores rated on the ECERS-R (30 classrooms). Mean scores are listed first, followed by the range of scores across the classrooms that were assessed.

Table 3: ITERS-R Scores (n=4)

Space & Furnishings	Personal Care Routines	Listening & Talking	Learning Activities	Interaction	Program Structure	Parents & Staff	Overall Rating
Avg: 5.28 Range: 4.40-6.20	5.50 4.70-6.22	5.35 2.30-6.60	5.07 3.40-6.50	6.11 3.80-7.00	5.68 4.30-6.33	4.98 3.90-6.50	5.35 3.80-6.15
<i>1 = inadequate 3 = minimal 5 = good 7 = excellent</i>							

Table 4: ECERS-R Scores (n=30)

Space & Furnishings	Personal Care Routines	Language-Reasoning	Learning Activities	Interaction	Program Structure	Parents & Staff	Overall Rating
Avg: 5.73 Range: 3.87-7.00	5.62 3.00-7.00	6.34 4.00-7.00	5.42 3.30-6.80	6.48 3.80-7.00	6.29 3.50-7.00	6.08 4.33-7.00	5.91 4.29-6.75
<i>1 = inadequate 3 = minimal 5 = good 7 = excellent</i>							

Areas of strength (average rating of 5 or greater) among infant and toddler classrooms include space and furnishings, personal care routines, interaction, and program structure. The most variability (as reflected in the range of scores) across the classrooms for the infant programs was in the area of interaction with children including: listening and talking, learning activities and interaction. The overall rating of 5.35 is higher than ratings for infant/toddler center-based care in Nebraska (4.51) (Midwest Child Care Research Consortium, 2002).

Average ratings across all areas were 5.00 or greater in the preschool classrooms that were rated in the Nebraska state funded early childhood programs. Areas of strength were in the areas of language and learning, program structure, interaction, and parents and staff. There was great variability across the classrooms in all of the areas assessed as reflected in the range of scores. The overall rating of 5.91 is higher than ratings for preschool centered-based care in Nebraska (4.38) (Midwest Child Care Research Consortium, 2002).

Two 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 (2 classrooms).

Table 5: Program Quality Assessment Scores (Baseline)

Learning Environment	Daily Routine	Adult Child Interaction	Curriculum Planning & Assessment	Parent Involvement -Family Services	Staff Qualifications & Development	Program Management	Overall Rating
Avg: 4.50	3.86	4.82	4.00	4.28	3.92	4.23	4.23
Range: 4.33-4.67	3.42-4.29	4.82-4.82	3.80-4.20	3.75-4.80	3.27-4.57	3.56-4.90	4.02-4.43
1=low quality 5=high quality							

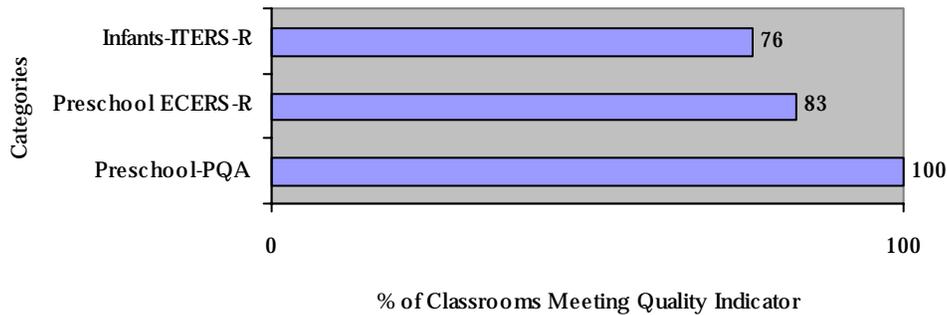
n=2

Areas of strengths (average rating of 4 or greater) were in the areas of learning environment, adult-child interaction, parent involvement and program management. There was great variability between the two classrooms as reflected in the range of scores in most areas. Less variability was noted in the area of learning environment and adult-child interaction. Both classrooms were rated over 4 on the overall average, suggesting high quality care.

A high percentage of early childhood classrooms met or were above the state established indicator of quality (rated equal to or greater than 5.0 on the overall average for the ITTERS-R or ECERS-R and 4.0 or for the PQA).

These findings are summarized in Figure 5. Overall, these results suggest that quality early childhood programs are available for children who participate in the state funded Nebraska early childhood programs.

Figure 5:
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 keep the accreditation current thereafter. Seven programs are currently accredited, fifteen are in the self-study phase, and six have not yet begun the self-study process. Of those currently in the self-study phase, six expected validation visits in late 2003. Programs not yet in the self-study process were in their first year of operation in 2002-03.

Child Outcomes

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 (2002) or Preschoolers (Brinkman, N., Barton, H., and Taylor, L, 2003), Work Sampling System (Meisels, et al, 1995), and Creative Curriculum Developmental Continuum (Dodge, et al, 2003). 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' 3rd, 4th, 5th, and 7th grade math and reading scores on standardized achievement tests used by the local school district.

Summary of Short-Term Developmental Outcomes

COR. Developmental skills of preschool children were monitored through the use of the High/Scope Child Observation Record-Preschool and Infant & Toddler (High/Scope Educational Research Foundation, 2003, 2002). Results are summarized in Figures 5 (preschool outcomes) and 6 (infant & toddler outcomes). These data represent information from 17 classrooms (preschool) and 4 classrooms (infant & toddler) across 16 programs. The COR scores are represented in levels (ranging from 1 through 4). The results suggest that for preschool children, the most growth occurred in three areas including language and literacy, creative representation, music and movement, and initiative. Children in these areas had a gain score of at least .5. The total score gain score was .4. Based on High/Scope Educational Research Foundation data, these results suggest that children in these areas are demonstrating medium COR gain scores. The results suggest that infants/toddlers had consistently large level gains (all greater than .9). No normative data from High/Scope is available for this age of children to interpret the gain score.

Figure 5
Average COR Scores for Preschool Children

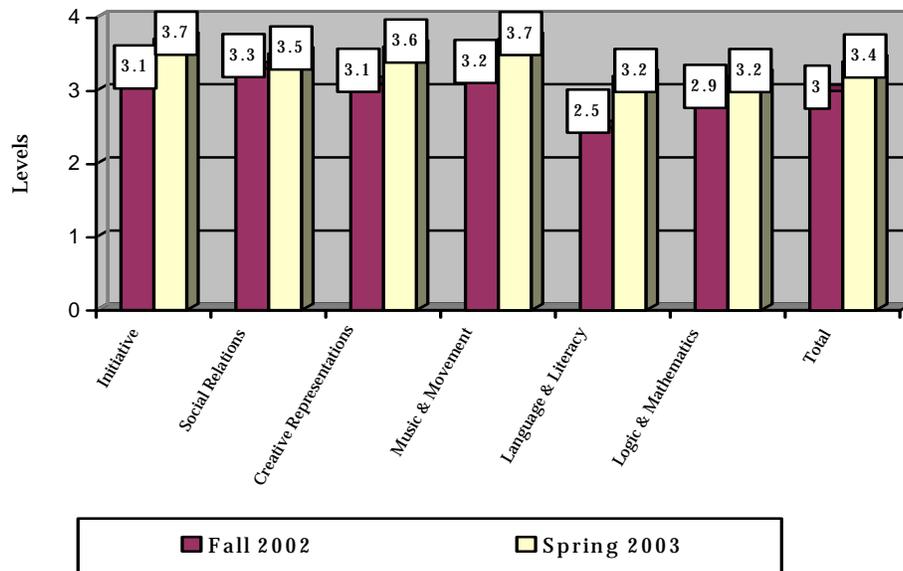
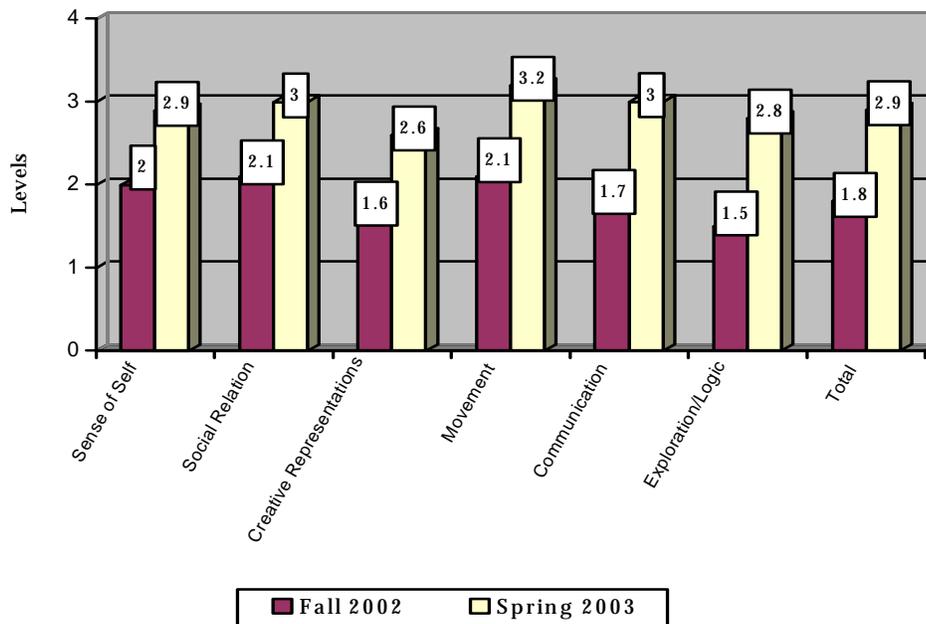


Figure 6
Average COR Scores for Infants and Toddlers



Work Sampling System. Developmental skills of preschool children were monitored through the use of the Work Sampling System (Meisels, et al, 1995). Results are summarized in Figures 7 (3-year-olds) and Figure 8 (4-year-olds). These data represent information from one (1) program including both fall-spring assessments. The results reflect the percentage of children that met proficiency in each content area. The results indicate a majority of the children were proficient for their age group across all areas (50% or higher). Children made progress in all areas except for math and science. The greatest gains were in the areas of personal-social, language and literacy, and social studies for 3-year-olds and language and literacy and social studies for 4-year-olds. Mathematical and scientific thinking showed the lowest proficiency for both groups.

Figure 7
Percentage Proficient for 3-Year Old Children Assessed with Work Sampling System

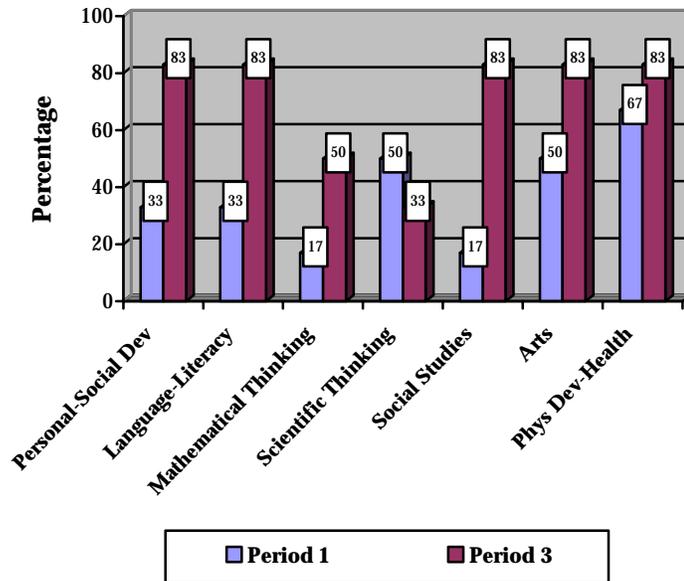
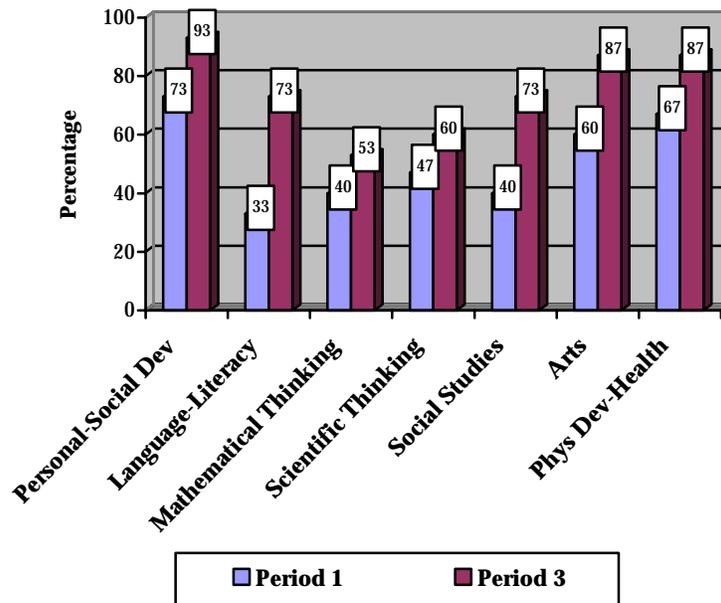
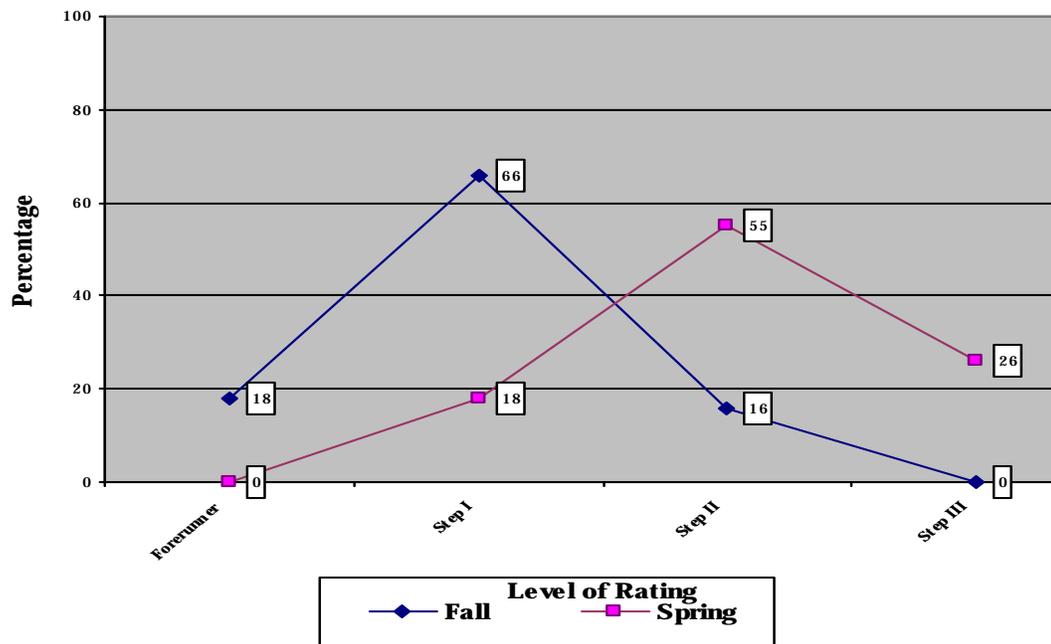


Figure 8
Average Scores for 4-Year Old Children Assessed with Work Sampling System



Creative Curriculum Developmental Continuum. Developmental skills of preschool children were monitored through the use of the Creative Curriculum Developmental Continuum (Dodge, et al, 2003). 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.” The data, which are based on two (2) programs including fall-spring assessments, are summarized in Figure 9. The results indicated that 84% of the children were at the Forerunner or Step I stage of development in the fall and by spring, 81% of the children were rated at the Step II or III stage of development. These results suggest that a majority of the group of children made progress over time.

Figure 9
Child Outcomes with Creative Curriculum Developmental Continuum



Long Term Outcomes of Early Childhood Programs

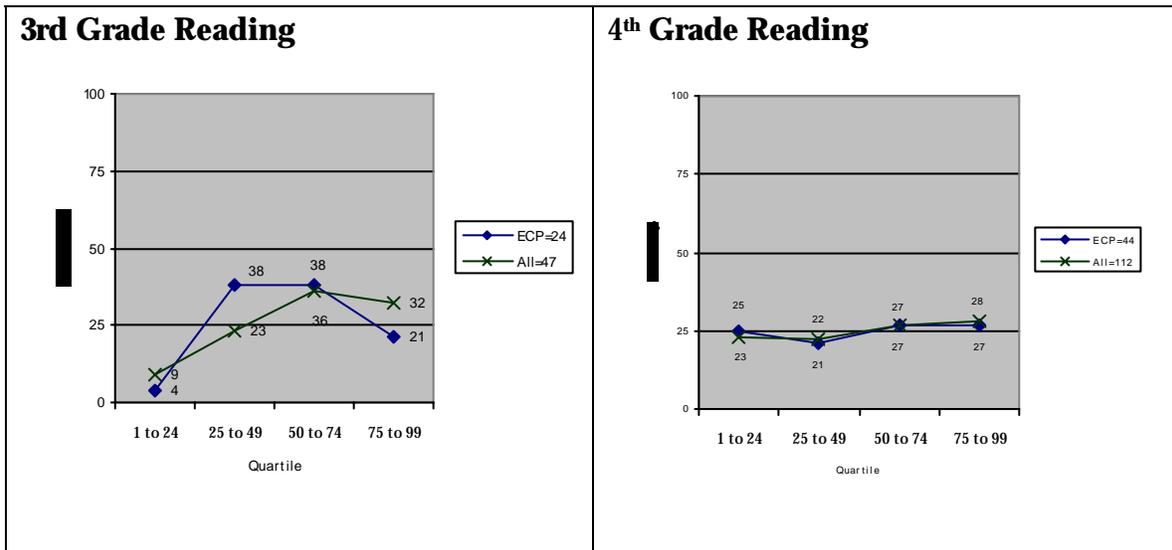
The Early Childhood Education Grant Program is designed to assist schools and education service units in providing high quality programs that lead to positive long term outcomes for young children, including ongoing success in school. Long term outcomes have been tracked for children in state-funded 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. From an evaluation perspective, the attrition may also result in less representative groups than were represented in the original groups.

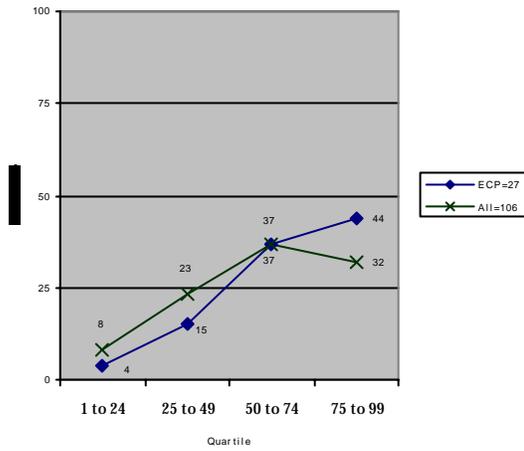
The long term impact of early childhood experiences was evaluated by comparing achievement scores on reading and math at four different times (3rd, 4th, 5th, and 7th grades) for children who experienced Nebraska’s state funded early childhood programs and their peers. Four programs provided follow-up data for reading; three programs for math. The number of programs providing data for reading for each of the grade levels is as follows: 3rd grade (two programs), 4th grade (four programs), 5th grade (two programs), 6th grade (one program), and 7th grade (one program).

In the area of reading, children served in a state-funded early childhood program slightly out-performed their peers. Overall, 65% (93 of 143) of early childhood program children scored in the 50% or greater category compared to only 59% (150 of 255) of the others. These results suggest state-funded early childhood programs have long-term positive reading outcomes.

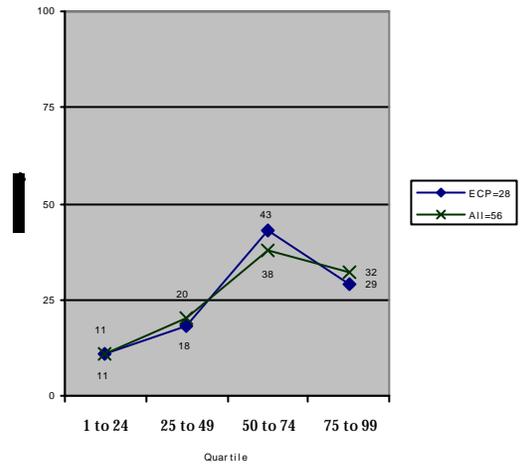
Figure 10
Reading Scores of 3rd-7th Grade Children in State-Funded Early Childhood Programs and Peers



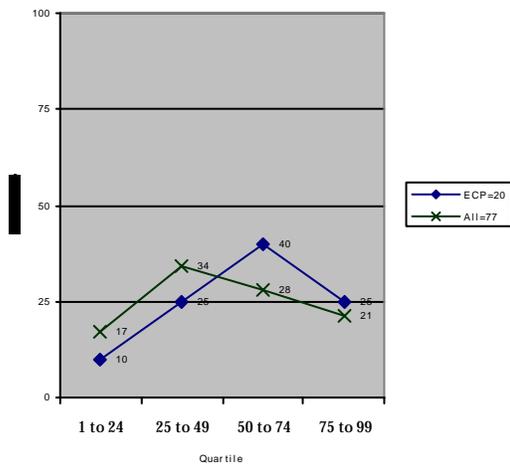
5th Grade Reading



6th Grade Reading

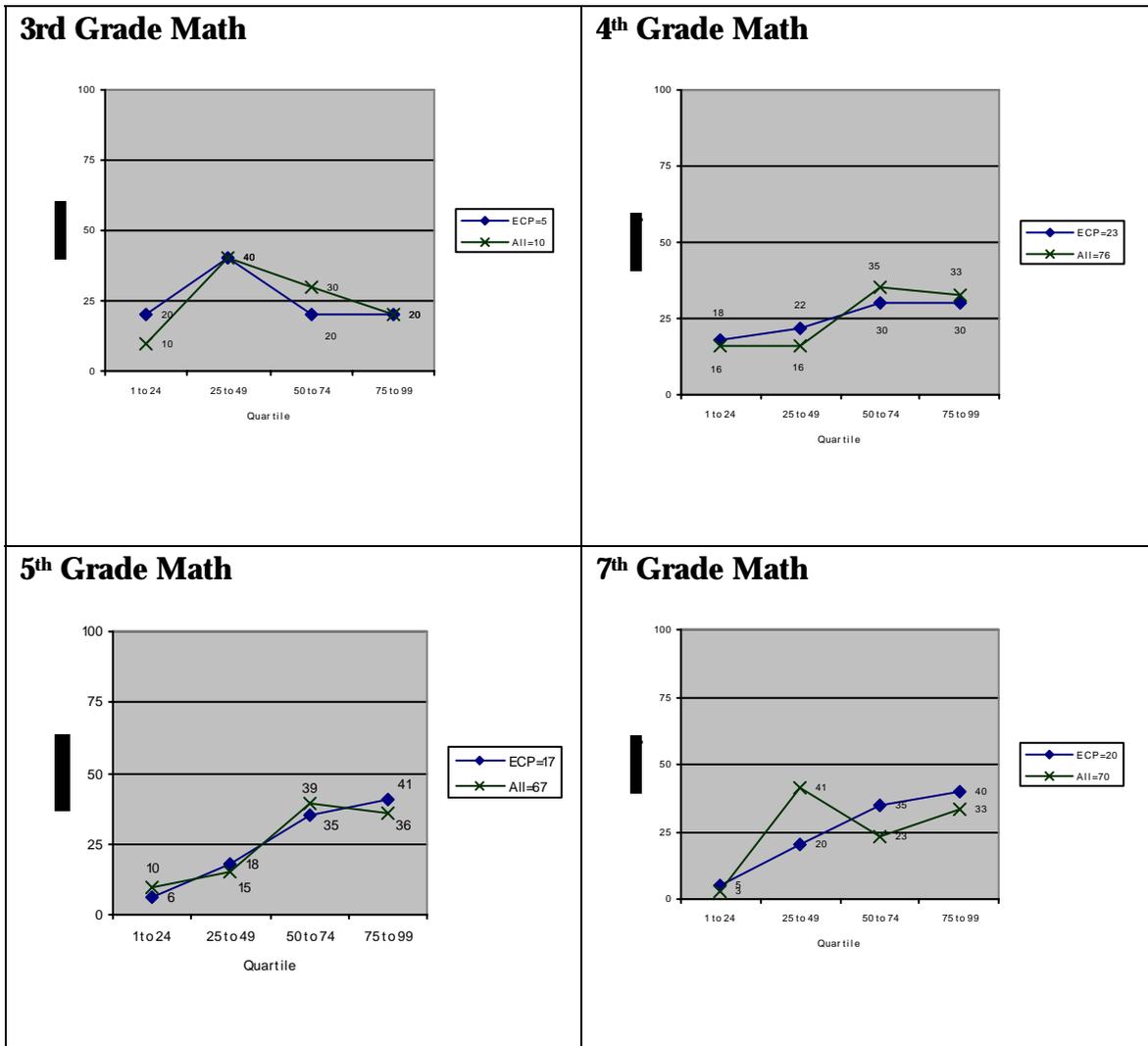


7th Grade Reading



In the area of math, both groups of children followed similar trends, but the children in state funded early childhood programs slightly under-performed their peers during the 3rd through 5th grade (early childhood program children ranging from 1-10% fewer children above the 50th quartile). The state-funded early childhood program children out-performed their peers at 7th grade (had 17% more children in the 50th quartile and above). Although the 7th grade state funded early childhood program group showed higher scores, more data across time is needed to determine if this finding is consistent and to confirm the long-term benefits of the early childhood programs in the area of math. Overall, more children in state funded early childhood programs scored in the 50% or greater category (68%, 44 of 65) than did others (65%, 102 of 158) when comparisons were made across all four age ranges.

Figure 11
Math Scores of 3rd-7th Grade ECP Children and Peers



Summary

Through the implementation of high quality early childhood education, Nebraska's Early Childhood Grant programs have successfully reached over 1,000 young children who are at high risk. Overall average classroom ratings on environmental rating scales were "good" or better, indicating that these early childhood programs are providing high quality environments to support children's learning.

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. The results of this evaluation indicate that Nebraska's children are demonstrating similar positive outcomes. Immediate positive effects were noted as the young children demonstrated improved developmental milestones during the course of the year. Even more compelling are the preliminary results of the long term benefits of these programs.

Participation in early childhood programs is reducing the achievement gaps that have been previously documented for this at-risk group of children. Comparisons between children who had early childhood program experiences and their classroom peers were made on standardized achievement scores. Results found that children who had early childhood program experience did better as they had a higher percentage of children that scored in the upper 50th percentile on achievement tests in all grades in the area of reading and at the 7th grade period in math.

When considering that this group of high risk students is being compared to their classroom peers, the results are even more remarkable. More long term data is needed to further evaluate the impact of this program. Overall, this evaluation suggests that Nebraska's investment in early childhood programs has resulted in high quality programs and positive outcomes for young children.

For more information contact:
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Lincoln, NE 68509-4987
Phone: (401) 471-3184
<http://www.nde.state.ne.us/ECH/ECH.html>

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