Early Childhood in CEHS

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University of Nebraska–Lincoln
College of Education & Human Sciences
Message from the Dean

Dear Friends and Colleagues;

Here at the University of Nebraska–Lincoln, in the College of Education and Human Sciences (CEHS) faculty, staff, students and alumni are united in their efforts to enhance the lives of young children and their families—at home, at school, and in the community. Although the College concerns itself with subject matter that traverses the lifespan, the issues facing the youngest members of our society are of special interest to CEHS scholars. Thus, early childhood is a significant focus for teaching and learning, research and creative work, outreach and Extension conducted within the College. This report highlights some of that work.

Within the next few pages, you will discover that members of the CEHS community are implementing a variety of initiatives involving children birth to age eight, their families and the societal organizations that support them. Such initiatives range from attention to almost every aspect of young children’s development—cognitive, language, social, cultural and physical—to program development and intervention, to assessment and program evaluation, to professional preparation. What distinguishes these initiatives is their:

• breadth (e.g., more than 100 courses taught across 7 different departments in one college; research on young children conducted in all of our units)

• depth (e.g., initiatives at the bachelors, masters and doctoral levels; longitudinal research; longstanding programs in the community)

• interdisciplinary nature (e.g., 2 by 2 agreements with community colleges; integration of subject areas such as early childhood education, special education and elementary education to create unified programs across multiple departments)

• systemic orientation (e.g., focus on the dynamic interactions and influences of multiple systems such as home, school, peer group, care outside the home, communities, and cultures)

• emphasis on linking theory and practice (e.g., applied research that addresses the practical perennial problems faced by individuals, families, schools and communities; development of tools for parents and resources for teachers and other community professionals; links between research and outreach/Extension).

CEHS is the newest college on the UNL campus. It was originated to create new ways of teaching about, studying and working with individuals, families, schools and communities. This report on young children is the first of several we will issue to describe the work of the College. We find the work exciting, challenging and meaningful. We hope you will too and that you might be inspired to join us in some way.

Sincerely,

Marjorie Kostelnik
Dean, College of Education & Human Sciences
University of Nebraska–Lincoln
CEHS addresses a wide array of Early Childhood issues on campus and in the field.

Current projects include: working with children with disabilities; autism in early childhood; children with or at-risk of emotional and behavioral challenges; children in poverty; intervention programs for children such as Head Start, Early Head Start, Even Start, and state targeted Pre-Kindergarten programs; English Language Learning; language and literacy programs; curriculum development; working with parents; Child Care Block Grant tuition subsidies for low-income children; assessment and continuous improvement in intervention programs; early childhood in Europe and eastern Asia, and more.
CEHS Has a Significant Number of Faculty Whose Work Focuses on Young Children and Their Families

These faculty come from all seven departments in the College:

- Child, Youth & Family Studies
- Educational Administration
- Educational Psychology
- Nutrition & Health Sciences
- Special Education & Communication Disorders
- Teaching, Learning & Teacher Education
- Textiles, Clothing & Design

Their work addresses the following early childhood themes.

- Assessment and Program Evaluation
- Child Development with a special emphasis on behavioral, language and social development
- Connections Among Families, Pre-primary Settings and Schools
- Diverse Learners with special emphasis on cultural and linguistic diversity, economic diversity, and diverse abilities and special needs
- Early Childhood Curriculum with a special emphasis on nature education, early literacy, early mathematics and science
- Early Childhood Professional Preparation
- Health Promotion
- Reflective Practices and Documentation
One in four CEHS faculty members identify children from birth to age eight as a significant focus of their teaching, research and/or Extension/outreach.

CEHS offers nearly 100 courses in Early Childhood.

CEHS Fact
CEHS Offers a Wide Choice of Undergraduate and Graduate Programs Involving Early Childhood

The College offers three undergraduate options, six endorsements, eight masters areas, and five doctoral specializations with an early childhood focus.

Undergraduate Programs and Endorsements
- Child Development/Early Childhood Education
- Elementary Education
  - Early Childhood Education – Inclusive (Birth-Grade 3)
  - Elementary Education (K-6)
  - Elementary Education and Art (K-6)
  - Elementary Education and Deaf or Hard of Hearing Education
  - Elementary Education and Early Childhood Education
  - Elementary Education and Mild/Moderate Disabilities (K-6)
  - Inclusive Early Childhood Education (Birth to Grade 3)

Masters Programs
- Child Development/Early Childhood Education
- Cognition, Learning and Development
- K-12 Educational Administration
- Nutrition and Health Sciences
- Special Education
- Speech–Language Pathology
- Teaching, Curriculum and Learning
- Textile – Apparel

Doctoral Programs – specializations encompass early childhood
- Audiology
- Child, Youth and Family Studies
- Cognition, Learning and Development
- School Psychology
- Teaching, Curriculum and Learning
CEHS has Successful Graduates

- Alternative Youth Learning Centers
- Child Care Centers
- Child Support Enforcement
- Churches
- Community Health Promotion Programs
- Comprehensive Mental Health Services
- Department of Social Services/Child Protective Services
- Education Cooperatives
- Foster Care
- Head Start/Early Head Start/Even Start Programs
- Hospitals and Clinics
- Nonprofit Organizations - Child Specialist
- Preschools
- Schools
- Retail Businesses
- Youth Agencies
- Youth Care
In Nebraska and nationwide, there is an increasing need for early childhood professionals whose education encompasses the preprimary and the early primary years and also integrates knowledge of typical child development with special education. To meet this demand, CEHS faculty created the Inclusive Early Childhood Education (IECE) program. Graduates obtain a Nebraska teaching certificate in Unified Early Childhood Education and are prepared to work with young children (birth to grade 3) in kindergarten through the early elementary grades, in early childhood special education, and in other early childhood programs such as Title I, Head Start, and Early Head Start.

The IECE program involves a collaborative effort among the departments of Child, Youth & Family Studies; Teaching, Learning & Teacher Education; and Special Education & Communication Disorders. Students majoring in IECE receive preparation in child development, early childhood special education (birth to grade 3) and elementary education (K-3) with a strong emphasis on family involvement. This is a carefully integrated program across disciplines and program settings. Students do more than simply take a few courses from each of the three departments. Instead, they experience an integrated, challenging program of study that encompasses child development and learning, early childhood curriculum, inclusive practices for children with special needs, early reading instruction, family literacy and parent education. Students also take part in a variety of practicum experiences in preprimary and primary settings, working with children and families whose circumstances and needs vary widely.

Begun in 2003, program graduates are already becoming key players in the Nebraska education community. Most importantly, the program is addressing acute shortages in qualified personnel prepared to work with young children with developmental delays and language differences in community child care, preschool and early primary school programs. The ‘Inclusive’ program is among the fastest growing majors in the College, currently enrolling 109 students.
The Need for Early Childhood Professionals is Growing

In the United State today, approximately half of all the three- and four-year-olds (4 million children) are enrolled in an early care/education program of some kind. The number of five-year-olds in early childhood programs is even higher, reaching up to 80% of the total five-year-old population. By age six nearly every child in the country is a “school” child.
About to celebrate its 80th year of operation, the Ruth Staples Child Development Laboratory (CDL) is exclusively designed to meet the learning needs of young children and their families. This nationally accredited program offers full and half-day childcare services for approximately 42 children, ages two through five years, representing 18 countries. Each semester approximately 90-100 university students observe, plan, implement and evaluate activities with children under the supervision of master teachers who are faculty in the Department of Child, Youth and Family Studies. The facility includes observation booths and video/recording equipment in each classroom to support teacher training and research.

Programs carried out in the CDL:
- Provide researchers with the opportunity to investigate significant early childhood issues.
- Prepare future professionals to work respectfully and effectively with diverse populations of children and families.
- Provide input to policy makers in the community, state and nation that builds on the best of what we know about designing programs for diverse populations of young children.

Three foci in particular distinguish the teaching, research and outreach that takes place in the CDL.

- **Helping Diverse Learners Reach Their Maximum Potential**
  The CDL explicitly includes young learners who are culturally, linguistically, and economically diverse; and who exhibit a wide range of abilities including special needs. The most recent program is The Autism Project, a collaborative venture between CDL staff and faculty in the Department of Special Education & Communication Disorders. Funded by the GWR Sunshine Foundation, the project will promote research, education, and service related to young children with autism spectrum disorders and their families.

- **Promoting Reflective Practice in Early Childhood Educators through Pedagogical Documentation**
  CEHS faculty and students are developing new approaches to improving early learning environments by enhancing and integrating observation, planning and assessment, and improving parent-teacher communications through pedagogical documentation. This documentation involves the process of gathering evidence of children’s learning through observational notes, photography, work samples, and conversation transcripts. The evidence is then analyzed, shared, interpreted and displayed by teachers. CEHS scholars have found that documentation enhances professional skills, helps children learn more, makes parents curious about how children learn, and inspires the public to respect the contributions of early educators in preparing young children for school.

- **Integrating Nature Education throughout the Curriculum**
  National concern is growing about modern-day children’s lack of experience with the natural world and about increases in childhood obesity that results, in part, from their lack of outdoor play. In response, CEHS has joined with private foundations and the Nebraska Department of Education to promote nature education and inspire young children, families and educators to connect more deeply with the world around them. The CDL is participating in the Nebraska Nature Education Network to develop a national system of Nature Explore Classrooms. Program faculty are devising research-based strategies to infuse knowledge and skills about Nature Education throughout the preservice curriculum in a systematic and coherent way that results in measurable changes in teacher behavior and child outcomes.
The College of Education and Human Sciences provides outreach at the local, state and national level putting our experience and expertise to practical use. CEHS outreach programs serve more than 4,200 individuals and families each year through our on-campus facilities. These facilities serve individuals across the life span, including young children.

**Barkley Center Speech-Language and Hearing Clinic** provides services for individuals with speech, language, hearing and other disabilities. Services available include hearing evaluations, hearing aid selection, habilitation and rehabilitation for persons who are deaf and hard of hearing.

**Counseling and School Psychology Clinic** conducts psychological and educational evaluations of children and youth to address referral questions from parents/caregivers and/or schools.

**Family Resource Center** is a non-profit family therapy center located on campus providing counseling and therapy for individuals, couples and families from the community.

**Great Plains Center for Reading and Writing** provides the tools and guidance leading to the achievement of critical literacy in the local community, the Great Plains region and the nation at-large through research, training, and service. The institute includes a reading center designed to serve elementary, middle, and high school students who are reading 1-3 years below grade level, and whose primary difficulties in school result from reading problems.
CEHS has a Strong Record of Obtaining External Funds to Support Early Childhood Initiatives

**Autism Project**, GWR Sunshine Foundation; Siegel (Special Education and Communication Disorders)

**Building Nebraska Families**, Nebraska Department of Health and Human Services; Koszewski, Schnepf (Nutrition and Health Sciences), Birnstihl (Institute of Agriculture and Natural Resources Cooperative Extension)

**Center for Behavior and Reading**, U.S. Department of Education; Epstein, Nelson (Special Education and Communication Disorders)

**Early Childhood Mental Health Project**, U.S. Department of Education; Epstein (Special Education and Communication Disorders)

**Early Speech Motor Development**, U.S. Department of Health and Human Services, National Institutes of Health, and National Institute of Child Health and Human Development; Green (Special Education and Communication Disorders)

**Evaluation of Efficacy of CBC for Addressing Disruptive Behaviors of Children-at-Risk for Academic Failure**, U.S. Department of Education; Sheridan, Glover (Center for Children, Youth, Families and Schools)

**Evaluation of Promising Models and Delivery Approaches to Child Care Provider Training**, Iowa State University; Torquati, Raikes (Child, Youth and Family Studies), Wilcox (Center on Children, Family and the Law)

**Evaluation of the National Assessment of Educational Progress**, U.S. Department of Education; Buckendahl, Davis (Educational Psychology)

**Indigenous Roots Teacher Education Program**, U.S. Department of Education; Engen-Wedin, McGowan (Teaching, Learning and Teacher Education)

**Leadership Training in Emotional Disturbance Disorders**, U.S. Department of Education; Epstein (Special Education and Communication Disorders)

**Leadership Training in Interdisciplinary Collaboration**, U.S. Department of Education; Sheridan (Educational Psychology)

**Math Matters: Improving Elementary Math Teacher Education in Nebraska**, National Science Foundation; Heaton, Fisher (Teaching, Learning and Teacher Education), Lewis (Mathematics)

**Midwest Child Care Research Consortium**, Department of Health and Human Services Administration for Children and Families; Torquati (Child, Youth and Family Studies), Wilcox (Center on Children, Family and the Law)

**Mountain-Prairie Upgrade Partnership – Early Childhood**, U.S. Department of Education; Eccarius, Marvin (Special Education and Communication Disorders)

**Nebraska Department of Education School-Based Assessment: STARS**, Nebraska Department of Education; Isernhagen (Educational Administration)

**Northeast Nebraska Paraprofessional Ladder Project**, U.S. Department of Education; Lopez (Teaching, Learning and Teacher Education), Jones (Northeast Research and Extension Center)

**Parent Engagement and Learning Birth to Five**, U.S. Department of Health and Human Services, National Institutes of Health, and National Institute of Child Health and Human Development; Sheridan (Educational Psychology) and Edwards (Child, Youth and Family Studies)

**Portales a Aprender Leer (PAL)**, U.S. Department of Education; Nelson (Special Education and Communication Disorders)

**Postdoctoral Training in Emotional and Behavioral Disorders**, U.S. Department of Education; Epstein (Special Education and Communication Disorders)
CEHS Research and Study Centers Address Early Childhood

Within the seven departments that make up the College of Education and Human Sciences, faculty and students engage in nationally recognized research and scholarship in early childhood studies. CEHS Research and Study Centers support this work.

- **Bureau of Educational Research and Field Services** provides services to school districts and policy makers in Nebraska directed toward facilities planning, school re-organization and educational policy issues.
- **Buros Center for Testing** provides national leadership in the advancement of testing practice.
- **Buros Institute for Assessment Consultation and Outreach** is an independent monitor of quality for commercially available and proprietary tests and testing programs.
- **Buros Institute of Mental Measurements** provides professional assistance, expertise, and information to users of commercially published tests, and promotes meaningful and appropriate test selection, utilization and practice.
- **Center for At-Risk Children’s Services** is a research center comprised of a team of experienced professionals committed to evaluating and developing services for children, families and communities.
- **Center for Instructional Innovation** applies basic research from cognitive psychology, linguistics, and cognitive science to the design and evaluation of educational practices in the nation’s schools.
- **Nebraska Center for Research on Children, Youth, Families and Schools** was designed to improve the understanding of how children and youth learn and adjust intellectually, socially, emotionally, physically and behaviorally; investigate the ecological contexts that influence the lives of children and youth; and explore interactions among them.
- **Nebraska Evaluation and Research Center** supports faculty and students with research projects by providing consultation and assistance with statistical analysis.
- **Office of Qualitative and Mixed Methods Research** provides consultation and assistance with statistical analysis to faculty and students with research projects.
Cameras, Computers and the Mystery of Human Speech

Adapting computer technology developed by Hollywood, a UNL speech scientist is hoping to learn how very young children’s motor development affects their speech and language.

The Department of Special Education and Communication Disorders is using a $1.8 million grant from the National Institutes of Health/National Institute on Deafness and Other Communication Disorders for a five-year study.

Ten percent of children entering first grade have moderate to severe speech disorders. Little is known about how children’s motor development affects the acquisition of sound. By using a sophisticated system of eight cameras wired to a computer, researchers will be able to watch and analyze the complexity of human speech development.

Human speech is very fast—up to 15 sounds per second — and we are coordinating up to 70 muscles while we are talking — most of these muscles being very small. It’s been impossible to capture and analyze speech movements from very young children until recently because the movements are too small and too fast to be analyzed by simple visual observation.

The new technique involves sticking small reflective dots on a subject’s face; cameras fixate on individual dots and transmit the subject’s movements to a computer—essentially how the film industry created Gollum in ‘Lord of the Rings’. The computer creates a real time, three-dimensional representation of the movements, which can be studied in fine detail.

The goal is to understand how various factors affect speech development in young children, particularly the impact of facial growth and parental speech habits.

This work will be the foundation for future studies. Knowing what is typical can help identify children at risk for speech-motor impairments and can eventually lead to new treatments for speech impairments.

Preschoolers Short on Vitamins

Health-conscious parents who feed their young children the same low-fat diet they consume for better health may inadvertently deprive their children of vitamin E, an important nutrient for growing bodies, a University of Nebraska nutrition scientist warns.

A study of preschool-age children living in Lincoln, Neb., found two-thirds of them deficient in vitamin E. Surprisingly, one-third of the children also weren’t getting enough vitamin C, commonly found in such kid-friendly foods as orange juice. Children deficient in either vitamin came equally from all ethnicities, genders and ages.

Researchers in the Department of Nutrition and Health Sciences and colleagues in the UNL Institute of Agriculture and Natural Resources tested 2- to 5-year-olds at four Lincoln day care centers. They drew blood samples from 22 ethnically diverse boys and girls to determine their vitamin E and C levels. Their parents also were interviewed to obtain dietary intakes of their children on two non-consecutive days.

The study’s goal also was to evaluate the National Academy of Sciences’ dietary recommendation for vitamin E in children. These recommendations were established in 2000 from adult data adjusted for children’s smaller body mass. The researcher found that the recommendations, in fact, matched her own findings and are appropriate.

To get the vitamin E they need, children should regularly consume whole milk, nuts and seeds, regular salad dressings, and whole-grain cereals fortified with vitamins plus plenty of citrus fruits and juices for vitamin C.
Rating System Could Help Parents Choose Child Care

High quality programs can lead to dramatic and long-lasting benefits for children, yielding a positive return on investment for society. Parents choosing child care for their young children could get help identifying high quality care from a quality rating system being piloted by the Midwest Child Care Research Consortium.

The Consortium, made up of researchers from UNL, Missouri, Kansas, Iowa State, and Mississippi State, is exploring a state rating system that would assess the level of quality offered in child care and early childhood education programs. UNL researchers in the Department of Child, Youth & Family Studies are working with the Nebraska Departments of Education and Health and Human Services, the Nebraska Association for the Education of Young Children, and individual child care providers to develop the rating system and to pilot it in a rural area and an urban area of Nebraska.

Quality rating systems (QRS) are used to assess, improve, and communicate the level of quality in child care and early childhood education settings. Each child care setting is typically assigned two to five stars, based on established, consistent criteria. The most commonly used measures for assessing quality are administrative policies and practices; learning environment; parent and family involvement; professional development and staff and director qualifications and training; and program evaluation and staff compensation.

In this project, 2,022 child care settings selected at random in Nebraska, Missouri, Iowa, and Kansas were surveyed “to get a snapshot of the quality of care offered. Of that total, 365 licensed centers and homes and license exempt providers who receive subsidies were selected for in-depth observation.

Data from observations and QRS criteria ratings will be used to assign star ratings and determine the quality of care for family and center providers. Participating providers receive feedback, including suggestions for steps to improve quality and to advance to the next level in the rating system. One year after the initial assessment of quality, data will be collected again to examine improvements in quality and to identify activities that providers participated in to help improve quality.

Empowering Parents to Prepare Kids for School Success

Parents are the first and best teachers of very young children. Yet many parents lack the skills that could help them prepare their children for success in school, and others are intimidated or lack experience with school settings. A new $5 million project, funded by the National Institute of Child Health and Development, will develop a comprehensive approach that merges parents’ skills and schools’ expertise to prepare children to succeed. The goal is to create stronger relationships among parents, children and schools in hopes that children will have more positive academic and social experiences.

Faculty in the Departments of Child, Youth & Family Studies and Educational Psychology are project partners with the University of Nebraska Medical Center and Lincoln Public Schools in the study titled “Parent Engagement and Child Learning Birth to Five.” The project promotes parents’ strengths in three areas: warmth and sensitivity; encouragement of their young child’s emerging curiosity and autonomy; and active participation in their child’s learning and literacy, both in the home and in formal child care and educational settings.

Over the course of the five-year project, about 600 children and their families will be involved. The children will be monitored over time to measure the effects of implementing the parent intervention early, as compared to at a later age.

Many prior research projects have studied the roles of parents and teachers, but no project has looked at how creating and supporting partnerships between families and schools can benefit young children across the entire birth-to-five age span, for both social-emotional and cognitive outcomes.
Once a child falls behind in learning to read, they can spend the rest of their life struggling to learn. A new program, developed by education researchers and educators in the Department of Special Education and Communication Disorders, aims to give every child a good start by teaching essential early reading skills.

Often preschools don’t emphasize early literacy instruction, so kids go to kindergarten unprepared for learning to read and they are already falling behind. This program focuses on those important pre-reading skills and follow-up to make sure the kids are prepared.

A $2.6 million grant from the U.S. Department of Education’s Early Reading First program funds the project, called “Portales a Aprender Leer” (Portals to Reading), in five South Sioux City preschools serving predominantly Spanish-speaking children and their families. The project is a partnership between the CEHS Center for At-Risk Children’s Services and the South Sioux City Community Schools.

The three-level program offers teachers new methods to develop early reading skills. The first level is a core preschool curriculum, developing cognitive, social and literacy skills. The second and third levels involve interventions to help children who aren’t making sufficient progress. There are well-defined benchmarks that help identify kids who are falling behind. Teachers then use Stepping Stones to Literacy, a program recently recognized by the U.S. Department of Education’s Institute of Education Sciences What Works Clearinghouse, to work one-on-one with students to teach key pre-reading skills.

A comprehensive evaluation of the program’s effectiveness is a critical part of the grant. The UNL project is one of several model demonstration sites throughout the country, and the Center for At-Risk Children’s Services will serve as the lead evaluator for the other sites.
Mission

The College of Education and Human Sciences is dedicated to enhancing the lives of individuals, families, schools, and communities and to strengthening the relationships among them.

Values

In pursuing our mission, the faculty, staff, students and graduates of the College of Education and Human Sciences are guided by shared values that inform every aspect of our work. Specifically, we value:

• Excellence in all aspects of the life of the College;

• Innovation, creativity, and curiosity as we address the complex issues facing individuals, families, schools, and communities;

• Respect for diverse people, ideas, voices and perspectives;

• Multidisciplinary approaches to scholarship that integrate teaching and learning, research, scholarship, and creative activity, outreach, and service;

• Working together to positively impact the lives of individuals, families, schools, and communities;

• Partnering with people in the community to support the mission and vision of the College of Education and Human Sciences;

• Emphasizing both the creation of new knowledge and its application to human and community needs thereby combining the strengths of a research and land-grant university.

Our Mission and Values in Action

The mission and values of CEHS come to life through research/creative work; teaching/learning; and Extension/outreach. Each of these functions informs and affects the others. This report describes how we are enacting our mission and values as the newest college at the University of Nebraska–Lincoln.

Photos and stories on pages 13 and 17: UNL Office of Research
Story on page 16 written by: Jana Miller, University of Nebraska–Lincoln alumnae