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MISSION STATEMENT

The Child Development Laboratory (CDL) is a university-based child care program sponsored by the Department of Human Development and Family Studies at the University of Illinois at Urbana-Champaign. The CDL offers full-day early-care and education programs for children ages six weeks to five years in 12 classrooms. These programs help fulfill the three-part mission of the CDL, which is to:

1. Create a site for personnel training in child development and early childhood education;
2. Provide a site for faculty and graduate student research in child development and early childhood education;
3. Provide model programs and leadership for the local, state, and national child development and early childhood communities.

By addressing this three-part mission, the CDL is able to articulate the interconnectedness between theory, research, and practice for the early childhood community. Support needed to facilitate the teaching, research and outreach/engagement activities outlined in this report is provided by the Department of Human Development and Family Studies; the College of Agricultural, Consumer and Environmental Sciences; and the Office of the Provost at the University of Illinois at Urbana-Champaign.

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OVERVIEW

4,187 STUDENT OBSERVATIONS
16 RESEARCH PROJECTS
1,272 STUDENT CLASS PROJECTS
77 STUDENT INTERNSHIP PLACEMENTS

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During the 2016-2017 academic year the CDL program experienced new and exciting directions in the types of teaching and research activities facilitated for faculty and students on the University of Illinois at Urbana/Champaign (UIUC) campus. In the teaching arena, several new types of class projects and student observations were conducted. These activities included a wide range of disciplines and foci including Food Science and Human Nutrition students developing competencies and skills needed to conduct dietary intake and overall health assessments of young children, to Speech and Hearing Sciences students learning how to conduct authentic language assessments in children’s naturally occurring classroom environments, to Kinesiology students learning appropriate data collection tools and protocols for assessing young children’s motor skill competencies. Similarly, the 2016-2017 academic year saw several new directions in the paradigms and theoretical lenses being used to guide research involving CDL children, families of enrolled children, teachers and classrooms. Most notable among these paradigm trends was the increase in the use of technology as a data collection tool for research on various aspects of young children’s development. Examples of such efforts included the use of computer-based apps on tablets for assessing children’s food preferences, to the pilot testing of electronic assessment tools for screening/identifying young children in need of additional numeracy-based learning opportunities, to the use of a tablet based app for facilitating children’s healthy eating habits, to the use of LENA audio recording and video devices as an alternate approach to accessing aspects of quality in early childhood classrooms. With a continued focus on expanding its approach to facilitating new and innovative teaching and research initiatives, CDL staff are committed to enhancing the ways in which our program supports teaching and research activities on the UIUC campus. Such efforts ultimately play an important role in the generation of new knowledge for both young learners (i.e., enrolled children) and adult learners (i.e., UIUC faculty and students).

As highlighted in the activities outlined in this report, CDL teachers and staff play an instrumental role in connecting theory and research to practice for the UIUC community. In facilitating 4,187 student observations, 1,272 student class projects, 16 research projects, and 77 student internship/practicum placements, the CDL program was integrated into the teaching, research and outreach/engagement activities of faculty, staff and students from six of the colleges on the UIUC campus (i.e., Agricultural, Consumer and Environmental Sciences; Applied Health Sciences; Education; Fine & Applied Arts; Liberal Arts & Sciences; Media) and the School of Social Work, as well as faculty and students from five departments at other Universities. CDL staff members take great pride in the role they play in supporting the academic mission of the UIUC community while at the same time providing high quality early care and education services for enrolled children and their families. This ability to successfully balance the demands of a heavy service and academic mission on the campus of a Research Institution has allowed the CDL program to emerge as a leader in university-based laboratory schools.

Brent A. McBride, PhD
Professor, Human Development
Director, Child Development Laboratory
OBSERVATIONS

TOTAL OBSERVATIONS = 4,187

3,105 Individual Student Observations

770 Group Observations

312 Parent Observations

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# UNIVERSITY COURSES SUPPORTED BY CDL OBSERVATIONS

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CLASS PROJECTS CONDUCTED AT CDL

AGCM 230

1 Student | Spring

Developed a series of photos of children in various CDL classrooms to use as part of a story writing assignment. The focus of the story/message communicated via the photos is a day in the life of a child attending the CDL.

FSHN 323

50 Students | Spring

Structured observations during mealtimes to conduct nutritional analysis of dietary intake during meals. Anthropometric assessments of all children (height and weight to calculate BMI) as conducted.

HD 3203

1 Students | Spring

A semester long service learning project in which the student investigated the goals, objectives, structure, function, and context of the CDL as an organization(s) including how it functions. Based on this investigation the student developed a set of recommendations for improving processes used at the CDL.

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**HDFS 105**

Students | Fall  265  

Students | Spring  264  

Students | Summer  33  

Guided observations to identify differences in the ways in which boys and girls interact with peers and adults.

**HDFS 290**

Students | Fall  34  

Students | Spring  34  

Observational group projects, in which students formulate a focused research question, develop an observational plan to address their question, and collect observational data from classrooms at ECDL and CDL (specific classrooms observed dependent on each group’s research question).

**HDFS Summer Academy**

Students  20  

Guided observation assignment to introduce and immerse high school students in the process of systematic data collection for social science research.

**HDFS Summer Internship Apprenticeship Program**

Students  8  

Students conduct naturalistic observations of preschool children in a childcare setting to learn about how research is conducted with children using observational techniques. Their goal in these observations is to identify whether gender differences occur among preschool children.  

1. Do preschoolers segregate themselves by sex?  
2. Do boys play differently than girls? What toys do boys and girls play with?  
3. During a group situation (e.g., snack time, story time) do girls behave differently than boys?  
4. Are girls more social than boys?  
5. Do childcare providers interact differently with boys and girls?

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JOUR 210
1 Student | Spring

A semester long service learning project in which the student investigated the goals, objectives, structure, function, and context of the CDL as an organization(s) including how it functions. Based on this investigation the student developed a set of recommendations for improving processes used at the CDL.

KINES 259
53 Students | Spring

The goal of the project is to introduce undergraduate students to research methods as well as observing motor development in real life contexts. Students observe different motor skills in boys and girls and across age groups, and are then tasked with classifying motor skill performance on various fine motor and gross motor skills.

KINES 262
112 Students | Fall 141 Students | Spring

Students conduct weekly lab observations to document different ages and stages of motor skill development during the infancy and early childhood period.

MUSC 449
15 Students | Fall

The purpose of this project was to immerse music education students in early care and education classrooms in order to develop and implement age appropriate music activities for children at different targeted age levels - i.e., infants, toddlers, young preschoolers, older preschoolers.

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PSYCH 318

68 Students | Spring

Guided observations in which students develop protocols for relating their observations to what they have learned in the classroom about typical motor, cognitive, communicative and social development for that age range.

PSYCH 363

49 Students | Spring  
39 Students | Spring  
10 Students | Summer

The purpose of this project is to experience the challenges and insight gained from one-on-one cognitive testing with children. Groups of students will learn to administer 2-3 cognitive tests and carry out testing of 3 children on those tests.

PSYCH 2237

1 Students | Fall

Guided observations designed to document the following areas of growth: Fine/Gross Motor Skills, Overregularization, Sociodramatic Play, Centration, Animism, Private Speech, Preoperational Stage, Parenting Styles, Autonomy vs. Shame and Doubt or Initiative v Guilt (depending on the age of the child), and Prosocial Behavior.

SHS 477

22 Students | Fall  
22 Students | Spring

Semester-long structured classroom field experiences to allow students to develop and implement language stimulation activities with children within classroom environments.

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SHS 577

4 Student | Summer

Semester long student projects focusing on the use of naturalistic language stimulation that fosters peer interaction during daily activities, such as outdoor play and snack, and also plan a specific language development activity to do during group and free choice time, center or choices time.

SOCW 451

15 Students | Summer

Guided observations to reinforce major developmental concepts during the infancy and toddlerhood periods.

SOCW 506

6 Students | Fall

Students complete a semester long placement during which they focus on the application of preventive and remedial intervention methods in the “real world” environment of infants and young children. In completing the projects students practice their observation skills and apply strategies and concepts learned in class at their service learning sites.

UIC Urban Health Program

4 Students | Spring

Nursing students develop and implement nutrition activities via the “Go, Slow, and Whoa” approach that focus on healthy nutrition practices for young children.

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Early Investments/Preschool Quality in Illinois

Investigator: Rachel Gordon, Professor, Department of Psychology, University of Illinois at Chicago

Subjects: All children and teaching staff in the PS 3 classroom

Purpose: To establish the feasibility and validate the use of the LENA audio recording and video devices as an alternate approach to accessing aspects of quality in early childhood classrooms

Children’s Understanding and Use of Generic Knowledge

Investigator: Andrei Cimpian, Associate Professor, Department of Psychology

Subjects: All CDL children between 36 and 60 months in age

Purpose: An ongoing study exploring the role of gender in explaining how young children make sense of and interact act with the world around them

Food Intake Feasibility Study

Investigator: Brent A. McBride, Professor, Department of Human Development and Family Studies, and the Division of Nutritional Sciences

Subjects: All CDL classrooms except the infant rooms

Purpose: To develop and explore the feasibility and reliability in using a digital photo template protocol as a means for assessing food intake during mealtimes at child care centers

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Students conduct naturalistic observations of preschool children in a childcare setting to learn about how research is conducted with children using observational techniques. Their goal in these observations is to identify whether gender differences occur among preschool children.

1. Do preschoolers segregate themselves by sex?
2. Do boys play differently than girls? What toys do boys and girls play with?
3. During a group situation (e.g., snack time, story time) do girls behave differently than boys?
4. Are girls more social than boys?
5. Do childcare providers interact differently with boys and girls?

**Observational Methods with Young Children**

**Investigator:** Kelly Tu, Assistant Professor, Department of Human Development and Family Studies  
**Subjects:** All children in the PS1, PS2, PS3 and Twos 1 classrooms  
**Purpose:** To explore the appropriate and inappropriate use of observational methods to answer questions related to children’s experiences in preschool and/or day care centers

**Influence of Infant Exposure to Interparental Conflict on Social-Moral Choice**

**Investigator:** Karli Oxford-Jordan, Department of Psychology, Earlham College  
**Subjects:** All available infants and toddlers between 2.5 and 30 months, and their parents  
**Purpose:** To explore possible correlations between exposure to interparental conflict, child temperamental traits, and children’s emotional well-being

**Validation of the mydidzday App for Assessing Healthy Behaviors Among Children**

**Investigator:** Diana Grigsby-Toussaint, Associate Professor, Department of Kinesiology and Community Health  
**Subjects:** All children and teaching staff in the PS 3 classroom  
**Purpose:** Pilot study exploring the impact of using a mobile phone app to promote healthy eating habits among preschool children enrolled in child care programs

**The Transition to Middle School Project**

**Investigator:** Kelly Tu, Assistant Professor, Department of Human Development and Family Studies  
**Subjects:** All CDL families with an older sibling between 10 and 11 years of age  
**Purpose:** An exploration of factors that may contribute to differences in youths’ adjustment to stress experienced during the transition to middle school settings

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**Teachers’ Nutrition and Healthful Feeding Practices in Child Care and Head Start Classrooms**

**Investigator:** Meghan Fisher, Doctoral Student, Department of Human Development and Family Studies  
**Subjects:** Head teachers in the PSI, PS2 and PS3 classrooms  
**Purpose:** To pilot test an online survey instrument designed to assess early care and education teachers’ perceptions of the components necessary to practice responsive feeding in child care settings, and the knowledge base needed in order to implement such practices.

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**Development of the Electronic Test of Early Numeracy**

**Investigator:** Art Baroody, Professor, Department of Curriculum and Instruction  
**Subjects:** All available CDL children between the ages of 36 and 42 months of age  
**Purpose:** To establish the feasibility and validity of the use of electronic devices (e.g., tablets) for assessing young children’s knowledge of numbers, counting and arithmetic.

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**Impact of Diet on Longitudinal Changes in the Fecal Microbiome of Children with Autism Spectrum Disorder**

**Investigator:** Kristen Harold, Doctoral Student, Division of Nutritional Sciences  
**Subjects:** All available CDL children between 24 and 60 months with an ASD diagnosis  
**Purpose:** To explore the role of diet in shaping the gut microbiota of children with ASD, and the relationships to ASD symptom severity.

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Early Childhood Teachers’ Beliefs About and Practices in Early Math Teaching and Learning Within the Context of Block Play: A Cross-Cultural Comparison

**Investigator:** Jeanette McCollum, Professor, Department of Special Education; Wu-ying Hsieh, Visiting Scholar

**Subjects:** PS1, PS2 and PS3 teachers and children

**Purpose:** An exploratory study of how early care and education teachers view the benefits of unit block play for the promotion of early mathematical learning, as well as their views on teachers’ roles in promoting such play

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**Development of the Electronic Test of Early Numeracy (e-TEN)**

**Investigator:** Art Baroody, Professor, Department of Curriculum and Instruction

**Subjects:** All available CDL children between the ages of 36 –45 months

**Purpose:** To pilot test and refine an electronic-based assessment tool for assessing numeracy concepts in order to identifying low-achieving students that may need additional mathematics learning opportunities

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**Standardization of a Card Sort Methodology: Establishing the Accuracy of Images of Food Items**

**Investigator:** Celeste Schultz, Assistant Professor, School of Nursing

**Subjects:** All CDL children between the ages of 48 and 60 months

**Purpose:** To assess the ability of young children to accurately identify food items that appear as images in a card sort task, and to explore whether children can reliability uses these images to identify food preferences

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Title: Vocal Development of English-Acquiring Children  
Investigator: Cynthia Johnson, Associate Professor, Department of Speech and Hearing Sciences; Seunghee Ha, Visiting Scholar, Department of Speech and Hearing Sciences.  
Subjects: All CDL children between the ages of birth to 24 months who are English Language Learners and a language other than English is spoken in the home  
Purpose: To identify variations in the developmental progression of language skills in young children who are English Language Learners, and to explore the role of early vocalization for later speech and language development in this population

Title: Toddler Development Project  
Investigator: Nancy McElwain, Professor, Department of Human Development and Family Studies  
Subjects: All available CDL children between the ages of 12 and 24 months  
Purpose: To explore new and/or novel protocols for assessing parent/child relationships during the toddler year

Title: Stress and Burnout in Early Care and Education Teachers  
Investigator: Eun Ji Kim, Graduate Student, Department of Special Education  
Subjects: All available CDL teachers  
Purpose: To pilot test an instrument designed to explore the perspectives of child care providers on teacher burnout and turnover, and their views on the role of prevention strategies that are beneficial in preventing burnout
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