CHILD DEVELOPMENT LABORATORY
ANNUAL REPORT | 2016-2017

ILLINOIS | Department of Human Development and Family Studies

CONTENTS

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 fullfill 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.

OVERVIEW

4,187

STUDENT OBESERVATIONS

16

RESEARCH PROJECTS

1,272

STUDENT CLASS PROJECTS

77

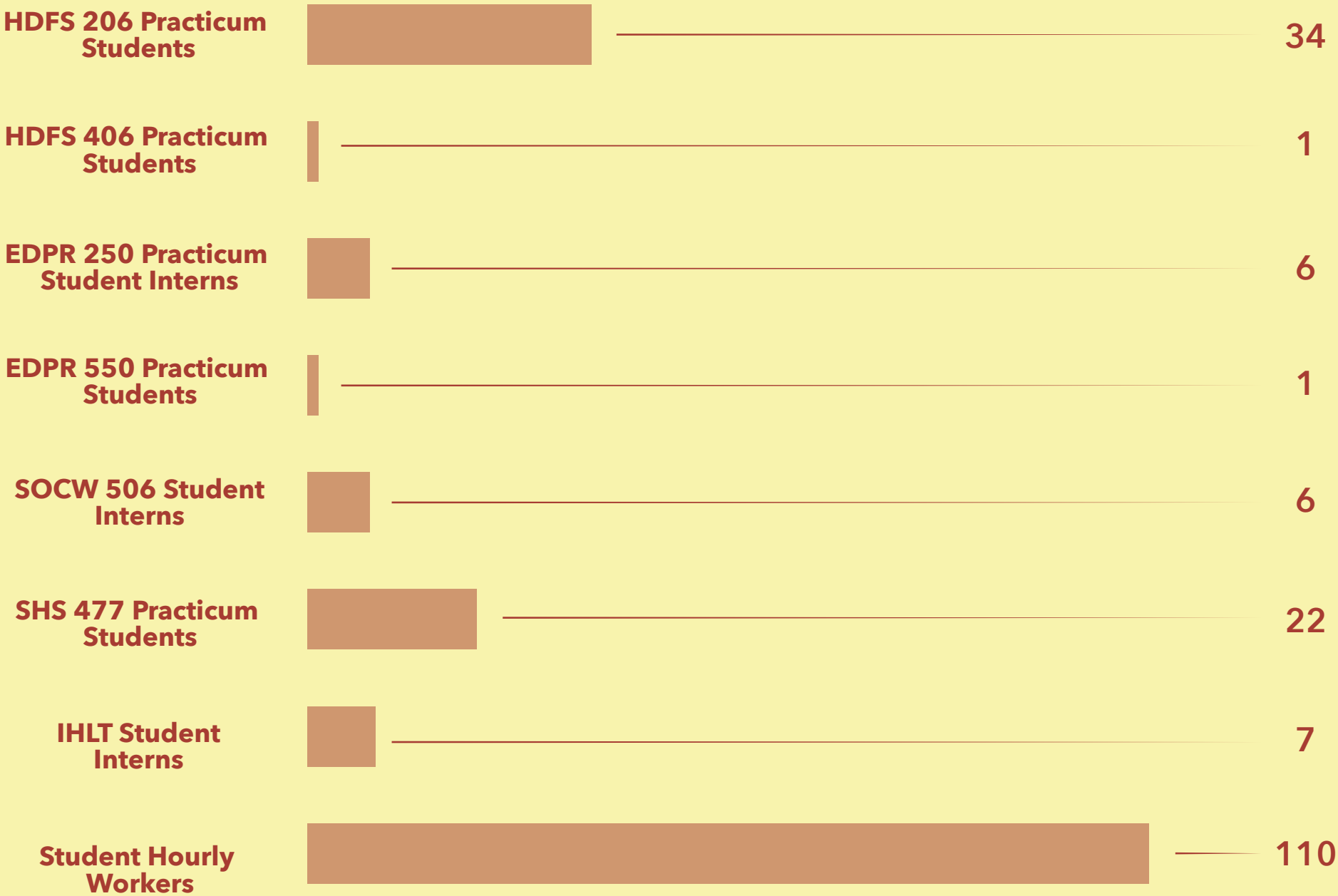
STUDENT INTERNSHIP PLACEMENTS

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 amongthese 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 arecommitted 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 communitywhile 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.

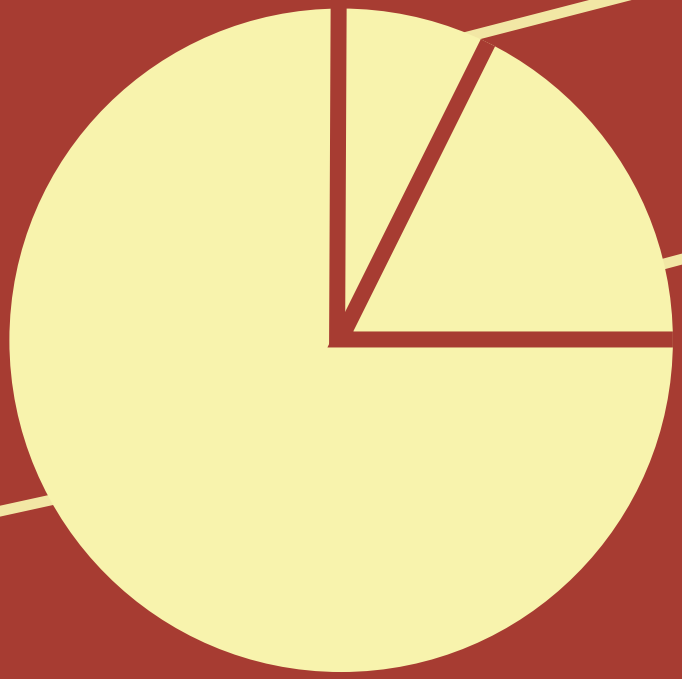
Brent A. McBride, PhD
Professor, Human Development
Director, Child Development Laboratory

PLACEMENTS


HDFS 206 Practicum Students
34
HDFS 406 Practicum Students
1
EDPR 250 Practicum Student Interns
6
EDPR 550 Practicum Students
1
SOCW 506 Student Interns
6
SHS 477 Practicum Students
22
IHLT Student Interns
7
Student Hourly Workers
110

OBSERVATIONS

TOTAL OBSERVATIONS = 4,187



312
Parent Observations

770
Group Observations

3,105
Individual Student Observations

UNIVERSITY COURSES SUPPORTD BY CDL OBSERVATIONS

AGCOM 230

AGED 220

ARCH 423

HDFS 105

HDFS 206

HDFS 290

HDFS 301

HDFS 494

HDFS 590

C&I 415

EDPR 250

FSHN 322

JOUR 210

KINES 259

KINES 262

IHLT 474

IHLT 475

MUS 449

PSYCH 216

PSYCH 318

PSYCH 363

PSYCH 396

SHS 477

SHS 577

SOCW 506

SOCW 451

SPED 414

SPED 591

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.

HDFS 105

265 Students | Fall

264 Students | Spring

33 Students | Summer

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

HDFS 290

34 Students | Fall

34 Students | Spring

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

20 Students

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

8 Students

Students conduct naturalistic observations of preschool children ina childcare setting to learn about how research is conducted with children using observational techniques. Their goal in these observationsisto identify whether gender differences occur among preschool children. **1.** Do preschoolerssegregate 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 interactdifferently with boys and girls?

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.

PSYCH 318

68 **Student | Spring**

Guided observations in which students develop protocols for relating their observations to what they have learned in the classroom abouttypical 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.

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.

RESEARCH PROJECTS

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

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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

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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

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

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

Investigator: Karli Oxford-Jordan, Department of Psycholgy, 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

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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

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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 explorationof factors that may contribute to differences in youths' adjustment to stress experienced during the transition to middle school settings

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

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

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

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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

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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 a turnover, and their views on the role of prevention strategies that are beneficial in preventing burnout

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