The Child Development Laboratory (CDL) is a university-based early care and education program sponsored by the Department of Human Development and Family Studies (HDFS) in the College of ACES at the University of Illinois at Urbana-Champaign (UIUC).

The CDL offers full-day programming for children ages six weeks to five years in 12 different classrooms.
Director's update

CDL 3-Part Mission

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 3-part mission, the CDL can articulate the interconnectedness between theory, research, and practice for faculty, staff, and students on the UIUC campus, as well as for vested stakeholders at the local, state, national, and international levels.
Although the COVID-19 pandemic upended life for all, the highly dedicated teachers and staff at the CDL were able to successfully navigate a multitude of mitigation protocols and guidelines that significantly changed how programming was provided for enrolled children and their families.
The following slide can be seen in the year–on–year comparisons, despite these mitigation protocols, the CDL was able to continue providing high-quality early care and education programming for enrolled children/families while at the same time facilitating targeted virtual learning and research activities for faculty and students on the UIUC campus.
## Director's update:
### 2019 – 2020 and 2020 – 2021 transition

### 2019 – 2020 (Academic Year (Pre-COVID))

- **1,715** Student class projects
  - 28 unique courses
- **57** Student placements
  - 6 unique courses / degree program
- **8** Research projects
  - 2 doctoral student and 6 faculty projects
- **3,397** Student observations
  - 31 unique courses and 13 different departments

**College Represented in Activities:**
- ACES, AHS, EDU, FAA, LAS, School of Social Work

### 2020 - 2021 (First year of COVID Mitigation restrictions)

- **981** Student class projects
  - 16 unique courses
- **96** Student placements
  - 5 unique courses / degree programs
- **6** Research projects
  - 3 doctoral student and 3 faculty projects
- **Unavailable** Student observations
  - Due to student logging onto Mediaspace channels created for courses.
- **16 unique courses and 7 different departments**

**College Represented in Activities:**
- ACES, AHS, BUS, EDU, ENG, FAA, LAS, School of Social Work, UIC School of Nursing
Although the numbers were significantly reduced as a result of the COVID-19 mitigation protocols that were in place, by focusing on the development and implementation of targeted virtual learning experiences and virtual approaches to research data collection, the CDL program was able to remain integrated into the teaching, research and outreach/engagement activities of faculty, staff, and students from across the UIUC campus during the 2020–2021 academic year.
Mission statement: Lab School

The missions of the CDL are parallels in three parts: The Teaching, Research, and Service missions of the University of Illinois Urbana-Champaign (UIUC).

As a laboratory school, we support the academic missions by:

1. Facilitating student observations of children
2. Allowing select research/teaching projects to occur at the school
3. Serving as a center for teaching training
What do we do?

- Provide full-day early care and education programming for enrolled children.
- 12 months, year-round programming
- 10 hours per day
Child Development Laboratory: 2020-2021 Annual Report

Who do we serve

144 Children: 6 weeks to 5 years of age

- Infants: 24
- Toddlers: 30
- Twos: 30
- Pre-schoolers: 60
Children from diverse backgrounds

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>40</td>
<td>26.67</td>
</tr>
<tr>
<td>Black</td>
<td>20</td>
<td>13.33</td>
</tr>
<tr>
<td>Caucasian</td>
<td>54</td>
<td>36.00</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15</td>
<td>10.00</td>
</tr>
<tr>
<td>Other</td>
<td>21</td>
<td>14.00</td>
</tr>
<tr>
<td>Native American</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The total for children from the diverse background was 150 and 100%.
Provide Care for Families of All Income Levels

32% 
68%

Families pay full tuition fees
Families receive financial support

BREAKDOWN OF 32% FAMILIES RECEIVE FINANCIAL SUPPORT

- 7% receive child care subsidy vouchers
- 5% receive CCAMPIS grant for low income student parents
- 20% Pay partial 2 or partial (reduced) tuition rates based on family size and income
Child Development Laboratory: Who do we serve

<table>
<thead>
<tr>
<th>Parent status</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILDREN OF STUDENTS (undergraduates and graduate)</td>
<td></td>
</tr>
<tr>
<td>CHILDREN OF FACULTY</td>
<td></td>
</tr>
<tr>
<td>CHILDREN OF STAFF</td>
<td></td>
</tr>
<tr>
<td>CHILDREN OF COMMUNITY FAMILIES</td>
<td></td>
</tr>
</tbody>
</table>
Child Development Laboratory: How do we provide high-quality care

EDUCATION BACKGROUND OF TEACHERS

- Head Teachers N = 12
- Supervisors N = 13
- Associates N = 7

0%  20%  40%  60%  80%

- CDA certificate or Equivalent
- Associate’s Degree
- Bachelor’s Degree
- Master’s Degree or Higher
The CDL is accredited by the National Assocation for the Education of Young Children (NAEYC).

NAEYC is a "professional membership organization that works to high-quality early learning for all young children, birth through age 8, by connecting early childhood practice, policy, and research."

NAEYC is one of the three accredited programs in the six county east central Illinois region.

NAEYC has identified 10 program areas and 362 individual accreditation criteria:

1. Relationship
2. Curriculum
3. Teaching
4. Assessment of child progress
5. Health
6. Staff competencies, preparation, and support
7. Families
8. Community relationship
9. Physical environment
10. Leadership and Management

These standards can help families make the right choice when they are looking for a childcare center, preschool, or kindergarten.
We provided new virtual opportunities to assist in remote learning during the 2020 – 2021 academic year:

1. **Live-Stream Virtual Sessions**: Real-time observation opportunities for students during class
2. **Targeted Learning Experience**: Recording of specific teacher-directed activities or developmental assessment
3. **Longitudinal Observations**: Repeated Observations to track child development and answer research questions

"For virtual observations, we were creating a Mediaspace channel for students. For targeted learning experiences, videos of the instructor interacting with select children were used with the Mediaspace channel. Videos included a wide range of small group, large group, and individuals' actions."

- PSY 363
Spring 2021
Pivoting during a pandemic: Experiences

**HDFS 105: Intro to Human Development (UIUC Course)**

“I so appreciate the CDL/ECDL collaboration to strengthen the impact of my course on student learning! The Child Development Laboratory administration and teachers have been very supportive of HDFS 105 (Life Span Development) child observations for many years. They have creatively offered outstanding opportunities for my students’ observation throughout the pandemic through live Zoom links and videotaped classroom sessions tailored to our course project needs. All this while maintaining highest standards of child security and confidentiality.”

- Jan Brooks  
Senior Instructor

**A Developmental Examination of Sharing in 2 – and 4- Years old (Research Project)**

“As a graduate student in social science, one of the most significant challenges during the pandemic has been figuring out ways to continuing data collection for my thesis. Fortunately, the wonderful staff of the Child Development Laboratory worked with us by developing safe protocols for data collection that allowed me to move forward with my thesis.”

- Fernando Sánchez Hernández  
PSY Graduate Student

**PSYC 363: Developmental Child Psych Lab (Course Project)**

“The CDL team worked with us to develop and adapt several research projects to a virtually/remote modality. This work included developing and cataloging video recording of children in the preschool for a naturalistic observation research project, typically done in person at the CDL. It also included allowing us to record one-on-one cognitive assessments of children in CDL that the class could then use to write up mock psychology reports. These projects allowed students to engage in research despite pandemic limits on in-person research.”

- Dr. Daniel Hyde  
Associated Professor

**A Mixed Methods Approach to Exploring Temperament and Peer Engagement Among Asian – Indian American Preschool Child (Research Project)**

“As someone trying to collect dissertation data during the pandemic, the CDL was extremely helpful as it gave me an opportunity to progress with my work even though I could not physically enter the classroom. I appreciate the effort CDL put into collecting data and making sure it worked for me.”

- Sanchari Banerjee  
EDPSY Graduate Student
## Outreach & engagement

### Numbers at a Glance

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Served</td>
<td>1077</td>
</tr>
<tr>
<td>Virtual Hours</td>
<td>194</td>
</tr>
<tr>
<td>Courses</td>
<td>19</td>
</tr>
<tr>
<td>Colleges:</td>
<td>5</td>
</tr>
<tr>
<td>Institutions:</td>
<td>2</td>
</tr>
<tr>
<td>Research Projects</td>
<td>6</td>
</tr>
</tbody>
</table>

### Departments:

- HDFS, C&I, PSYC, KIN & CHLH, SHS, DANC, FHSN, EDPSY, SPED
<table>
<thead>
<tr>
<th>Research activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Understanding Infant Mealtimes in ECE Settings</strong></td>
</tr>
<tr>
<td><strong>Investigator(s):</strong> Alexandra Lundquist (Doctoral Student, Division of Nutritional Sciences) and Brent A. McBride (Professor, Human Development and Family Studies)</td>
</tr>
<tr>
<td><strong>Projects Objective:</strong> Research team used videos to develop and validate an observational coding scheme for assessing responsive feeding behaviors in infant classrooms.</td>
</tr>
<tr>
<td><strong>Spring 2021 – Summer 2021</strong></td>
</tr>
<tr>
<td><strong>A Mixed Methods Approach Exploring Temperament and Peer Engagement Among Asian-Indian American Preschool Children</strong></td>
</tr>
<tr>
<td><strong>Investigator(s):</strong> Sanchari Banerjee (EDPSY graduate student) and Nidia Ruedas – Garcia (EDPSY faculty)</td>
</tr>
<tr>
<td><strong>Projects Objective:</strong> The research team used a sequential explanatory design to collect quantitative and qualitative data focused on examining variation in temperamental traits of Asian – Indian American (AIA) children and how these traits were related to peer interactions with children from different racial/ethnic backgrounds.</td>
</tr>
<tr>
<td><strong>Spring 2021 – Summer 2021</strong></td>
</tr>
</tbody>
</table>
## Research activities

### Formative Conservations about Research Approaches

**Investigator(s):** Jacinda Dariotis (HDFS Faculty)

### Pilot Testing of Machine Learning Algorithms with the LittleBeats™ Device

**Investigator(s):** Nancy McElwain (HDFS faculty) and Girish Chowdhary (College of Engineering, Computer Science faculty)

### Projects Objective:

**Formative Conservations about Research Approaches**

Focus group interviews were conducted with CDL families to explore:

1. How parents and guardians perceive research being conducted at the CDL with an emphasis on research designs that include collections of biomarkers (e.g., hair samples, fingerprint samples);
2. Parents’ perspectives on ways to reduce barriers to gaining consent for this type of research;
3. Interviews findings are used to inform content for a research proposal to a federal agency.

**Summer 2021**

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**Pilot Testing of Machine Learning Algorithms with the LittleBeats™ Device**

Projects Objective: Pilot testing of data collection protocols using the LittleBeats™ wearable device for gathering information and audio, ECG, and motion activity of children. Information was used to develop algorithms needed for analyzing biophysiological data gathered from children wearing the devices in early childhood classrooms.

**Summer 2021**
## Research activities

**A Developmental Examination of Sharing in 2 – and 4 – Years – Old**

**Investigator(s):** Daniel Hyde (PSY faculty) and Fernando Hernandez (PSY graduate student)

**Projects Objective:** Using a device developed specifically for the project, researchers had children participate in a “resource distribution game” designed to assess developmental differences in children’s understanding of complex factors related to sharing behaviors.

### Summer 2021

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**The Peer Coaching Project**

**Investigator(s):** Hedda Meadan (SPED faculty)

**Projects Objective:** Observations were used to establish the feasibility of gathering data for use in evaluating peer coaching approaches to support teachers working with children who engage in challenging behaviors.

### Summer 2021
Class projects:  
Fall 2020

**HDFS 105**  
Fall 2020  
Enrollment: 327  
**Project Objectives:** Students observe child activities, particularly to see if children self-select same-gendered playmates at the various preschool age levels. Students learned how to document naturalistic, objective observations and draw conclusions; observations served as the basis for a class paper assignment.

**HDFS 290**  
Fall 2020  
Enrollment: 33  
**Project Objectives:** Students in the undergraduate research methods course used the targeted videos to practice and develop competencies in using various observational data collection – e.g., time sampling, event sampling, etc.

**HDFS 206**  
Fall 2020  
Enrollment: 26  
**Project Objectives:** The course introduced the curriculum development for children from birth to age five and integrated child development theory and principles with programming for children in classroom settings.
Class projects: Fall 2020

Enrollment: 44

**HDFS 301**

**Project Objectives:** The goal of this project was to have each student complete a series of guided observations designed to illustrate the various developmental phenomena being discussed in class. A written paper summarizing responses to the guided observation questions was compiled and submitted for each age level – infants, toddlers, and preschoolers.

Enrollment: 9

**CI 421**

**Project Objectives:** Targeted observations were developed to reinforce the concepts and principles of EC programming being presented by the course instructor. Guided observation questions were provided for students to follow as they viewed the videos.

Enrollment: 12

**CI 422**

**Project Objectives:** The focus of the panel discussion was for students to learn firsthand teachers’ perspectives on the pros and cons of the use of technology in early childhood classrooms.
Class projects:
Fall 2020

CI 465
Fall 2020

Enrollment: 12

Project Objectives: Students viewed videos of multiple dialogic literacy experiences occurring in CDL classrooms and used an evaluative tool created by an instructor so that students could identify the strengths and limitations of each literacy experiences.

PSY 363
Fall 2020

Enrollment: 52

Project Objectives: Students worked in teams to view the videos, identify a developmental topic of interest, and then develop an observational coding scheme for use with the videos to assess the developmental phenomenon of interest.

NURS 341
(UIC)
Fall 2020

Enrollment: 48

Project Objectives: DCFS required CDL to implement health screenings of all children and parents during drop-off and pick-up times. A student enrolled in this community clinical course were trained and conducted these screenings on Thursdays.
Class projects: Fall 2020 and Spring 2021

IHLT 475
Fall 2020

Project Objectives: Intern did a systematic review of the CDL health policies and COVID-19 mitigation protocols and then completed systematic observations to document compliance with the policies and protocols.

Enrollment: 2

SHS 477/577
Fall 2020

Project Objectives: The UIUC Audiology and Speech-Language Pathology clinic conducted monthly pediatric audiology and speech-language pathology screenings of children between 2-5 years of age. Advanced undergraduate and graduate student clinicians conducted screenings under the supervision of SHS clinical faculty.

Enrollment: 23

HDFS 105
Spring 2021

Project Objectives: Students observed child activities, in particular, to see if children self-select same-gendered playmates at the various preschool age levels. Students learned how to document naturalistic, objective observations and draw conclusions; observations served as the basis for a class paper assignment.

Enrollment: 242
Class projects:
Spring 2021

HDFS 206
Spring 2021
Enrollment: 27

Project Objectives: The course introduced curriculum development for children from birth to age five and integrated child development theory and principles with programming for children in classroom settings.

CI 424
Spring 2021
Enrollment: 26

Project Objectives: The focus of the panel discussion was for students to exchange perspectives with teachers on how technology could be used to supplement learning in preschool classrooms. A special emphasis was on how perspectives have changed due to the COVID-19 pandemic.

DANC 350
Spring 2021
Enrollment: 12

Project Objectives: The UIUC Creative Dance for Children program director worked with two preschool-aged classrooms to collaborate with teachers to provide creative dance experience. UIUC students and instructors prepared lesson plans and activities and then implemented them virtually and in-person with CDL children/classrooms.
Class projects:
Spring 2021

IHLT 475  Spring 2021

**Project Objectives:** The project's focus was for the IHLTH students to develop a series of Public Service Announcements that communicate the mission of the CDL to multiple stakeholder groups - e.g., parents, greater CU community, UIUC students, UIUC faculty, etc. The final PSA emphasized the CDL is “more than just daycare.”

**Enrollment:** 35

FHSN 322  Spring 2021

**Project Objectives:** Students were assigned target children to observe and review demographic information proved. Based on observations, students developed a report based on their eating behavior, plotted and interpreted their growth using the WHO/CDC growth charts, calculated their energy, macro, and micronutrient needs, and created a nutritionally balanced one-day menu that was appropriate for their target child.

**Enrollment:** 47

JOUR 335  Spring 2021

**Project Objectives:** The target teacher participated in a one-on-one zoom interview with the student for a class assignment focused on audio journalism.

**Enrollment:** 1
Class projects:
Spring 2021

KIN 387
Spring 2021
Enrollment: 1

Project Objectives: Students conducted weekly observations on how the physical and social settings in a preschool classroom facilitated children’s motor skill development.

PSY 363
Spring 2021
Enrollment: 55

Project Objectives:
1. Students reviewed pre-recorded videos to test hypotheses developed in class regarding children’s peer interactions (observational task).
2. Instructors completed a cognitive task with infants and preschools. For infants, a Piagetian-based permanence task was demonstrated. With the preschools, a counting task. The game was played to assess counting abilities in different age ranges.

SHS 477/577
Spring 2021
Enrollment: 10

Project Objectives: The UIUC Audiology and Speech-Language Pathology clinic conducted monthly pediatric audiology and pathology screening of children between 2-5 years of age. Advanced undergraduate and graduate student clinicians conducted the screening under the supervision of SHS clinical faculty.
Class projects: Summer 2021

Project Objectives: The student worked in teams to view the videos, identify a developmental topic of interest, and then develop an observational coding scheme for use with the videos to assess the developmental phenomenon of interest.
Child Development Laboratory
(2020 -2021)
1. "Enrollment: 47

Project Objectives: Student were assigned target children to observe and review demographic information proved. Based on observations and students developed a report based on their eating behavior, plotted and interpreted their growth using the WHO/CDC growth charts, calculated their energy, macro and micronutrient needs, and created a nutritionally balanced one-day menu that was appropriate for their target child.

JOUR 335
Spring 2021

Enrollment: 1

Project Objectives: Target teacher participated in a one-on-one zoom interview with student for a class assignment focused on audio journalism.

Child Development Laboratory.
They Learn. We Learn.