Promoting Communication Observation System

Measuring Frequency of Caregiver use of Communication Promoting Strategies and Child Communicative Behaviors

Promoting Communication Strategies





Juniper Gardens Children's Project Kansas City, KS University of Kansas

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Measuring Frequency of Caregiver use of Communication Promoting Strategies and Child Communicative Behaviors

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About This Manual

The Promoting Communication Observation System (PC-Obs) is used to measure the fidelity with which parents or caregivers implement the Promoting Communication Tools for Advancing Language in Kids strategies. The PC TALK strategies were designed to be used with infants, toddlers, and preschoolers throughout daily activities in home and early childhood education settings, such as play and book activities, and in daily routines such as meal, diapering, and bath time. The PC TALK Strategies are naturalistic strategies that can be used by parents, teachers, care providers, early interventionists, and home visitors. Multiple studies have demonstrated that when used with high fidelity, the PC TALK strategies are effective in improving child language outcomes.

The PC-Obs Manual provides guidance and technical assistance data collection using the PC-Obs mobile app, definitions for the PC-Obs behaviors, guidance on use of the data dashboard to generate graphs.

Before You Begin Conducting Observations

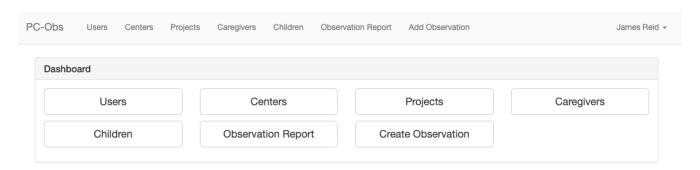
Before you begin using PC-Obs for data collection within your program, you will need to do the following in order to use the PC Observation System:

- Download the PC-Obs mobile app onto providers' devices (Android or iOS)
- Work with the PC TALK team to set up your program within the PC-Obs dashboard.
 - o Add centers this refers to the
 - Add observers to the dashboard as "Users."
- Obtain an PC-Obs data dashboard log-in and password for observers from the PC TALK team.
- Once your program and users/observers are set up within the data dashboard, observation teams within your program should determine which session length will be used for the duration of the study or project (how long the observation will be – this is typically 15 minutes), and select this time in the dashboard.
- Prior to conducting any observations, observers must be entered into the data dashboard as "Users."
- Prior to conducting observations with each caregiver and child, you must enter Caregivers (parents or teachers) and Children into the PC-Obs data dashboard.
 Considering using ID numbers or initials, rather than full names, for additional privacy.
- Users/observers should attend a PC-Obs training and achieve interobserver reliability on collecting PC-Obs data. See page 38 for the process for becoming certified on PC-Obs.

PC-Obs Dashboard Instructions for Program Managers

How do the Program Manager and Observer accounts differ?

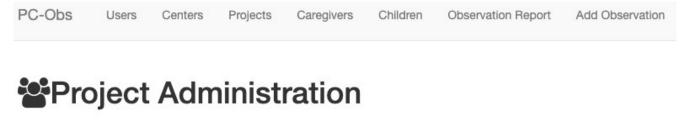
Program managers have the option of viewing, editing, or adding users, centers, projects, caregivers, and children in their PC-Obs dashboard. Additionally, they have the same options as any observer account: viewing the observation report and creating an observation. Observer accounts can only view an observation report and create an observation.



Note: From the dashboard homepage (as pictured above), click on the button of the corresponding option that you want to view or edit. You will also always find these same options as links at the top of any page in the dashboard. For instance, when editing users you can click on the "Centers" link at the top of the page to view or edit centers. Or, if you prefer, you click on "PC-Obs" to be returned to the dashboard homepage.

How do I view, edit, or add Projects?

To view, edit, or add Projects, click on the "Projects" button from the dashboard homepage. You can also click on the "Projects" link at the top of page. From the Project Administration page, you can view the list of projects that you've already added, edit the names of those projects, or add a new project.





To view or edit project information, click on the project name from your list of projects on the Project Administration page. Once you click on the project name, you will be directed to the Project Information page where you can see the users, caregivers, and children linked to the project. From this page, you can edit the project name, if necessary. To save your edits, click on the "Save" button. Once your edits are saved, you will see "Project successfully updated" text highlighted in green appear at the top of your page. Program Managers cannot remove users, caregivers, or children. To do this, please contact the PC-Obs team at Juniper Gardens Children's Project.

PC-Obs Users Centers Projects Caregivers Children Observation Report Add Observation

2+Project Information

Title

Project DX



Users

Name	Email
James Reid	ProgramManager@example.com

Caregivers

Name
Jimmy Test

Children

Name

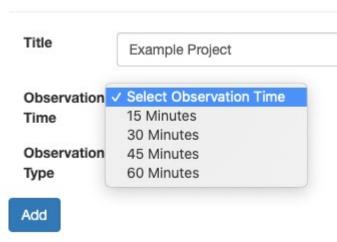
To add a project, click on the green "Add Project" button from the Project Administration page. Enter the title of your project in the blank "Title" text box and select the observation time and type.

PC-Obs	Users	Centers	Projects	Caregivers	Children	Observation Report	Add Observation
2 +Add	d Pr	oject					
Title							
Observation Time	Select	Observation [*]	Time 🗸				
Observation Type	Select	Observation [*]	Type 🗸				
Add							

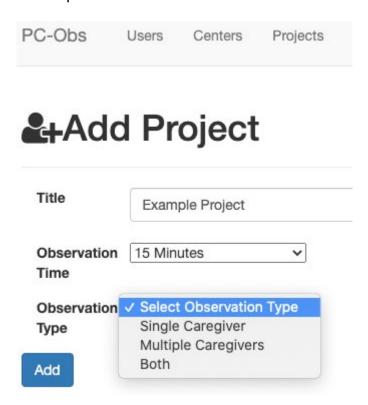
For observation time, you can select 15, 30, 45, or 60 minutes from the dropdown list.

PC-Obs	Users	Centers	Projects	



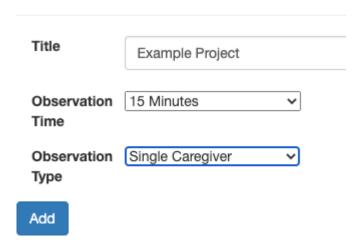


For the observation type, you can select single caregiver, multiple caregivers, or both from the dropdown list.



Once you've entered the project title and selected your observation time and types, click the blue "Add" button to add the project to the PC-Obs system. Once your changes are saved, you will see "*Project successfully added*" text highlighted in green appear at the top of your page.

Add Project



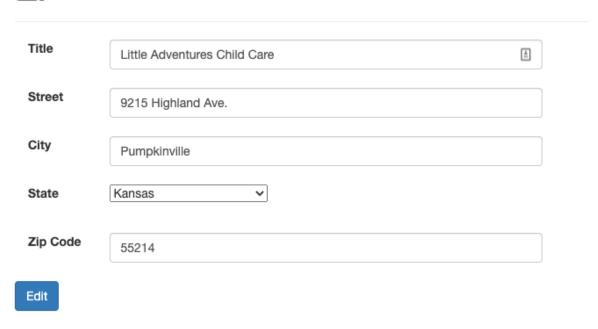
How do I view, edit, or add Centers?

To view, edit, or add Centers, click on the "*Centers*" button from the dashboard homepage. You can also click on the "*Centers*" link at the top of page. From the Center Administration page, you can view the list of centers that you've already added, edit the names of those centers, or add a new center.



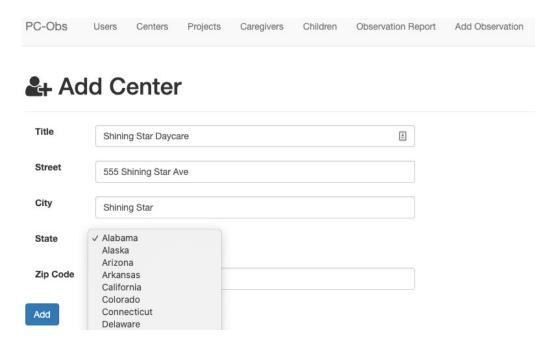
To view or edit center information, click on the center name from your list of centers on the Center Administration page. Once you click on the center name, you will be directed to the Center Information page where you can see the name of the center as well as the address (street, city, state, and zip code). From this page, you can edit the center name. To save your edits, click on the "Save" button. Once your edits are saved, you will see "Center successfully updated" text highlighted in green appear at the top of your page.

2+Center Information



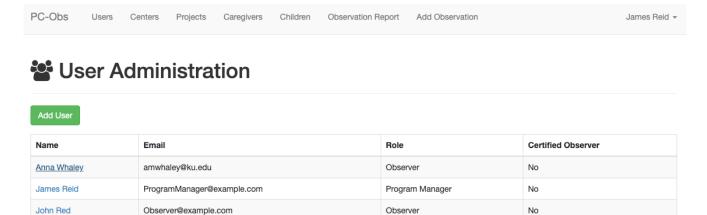
To add a center, click on the green "Add Center" button from the Center Administration page. Enter the title of your center in the blank "Title" box along with the address information.

Once you've entered the title and address of the center, click on the blue "Add" button to save your changes. Once your changes are saved, you will see "Center successfully added" text highlighted in green appear at the top of your page.



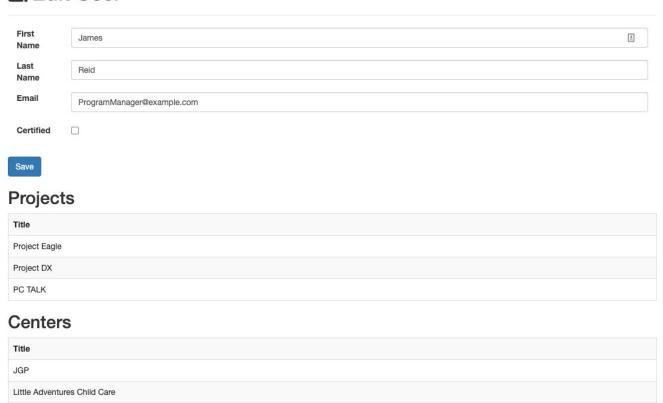
How do I view, edit, or add Users?

To view, edit, or add Users, click on the "Users" button from the dashboard homepage. You can also click on the "Users" link at the top of page. From the User Administration page, you can view the list of users that you've already added, edit the names and email addresses of existing users, or add a new user.



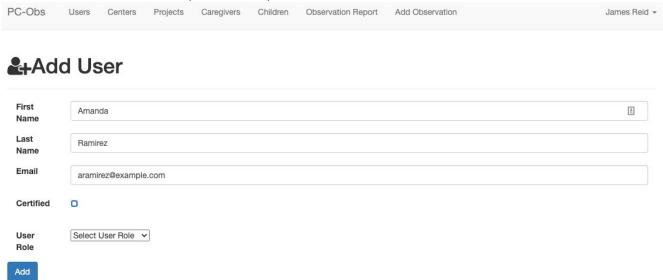
To view or edit user information, click on the user's name from your list of users on the User Administration page. Once you click on the user's name, you are directed to the Edit User page where you can see the user's first and last name, their email address, whether or not they are a PC-Obs certified observer, and projects and centers they are connected to in the system. From this page, you can edit the user's first and last name, email address, and certification status. To save your edits, click on the "Save" button. You will see "User successfully updated" text highlighted in green appear at the top of your page.

E+Edit User



To add a user, click on the green "Add User" button from the User Administration page. You will be directed to the Add User page where you will need to enter the user's first name, last name, email address, certification status, and user role.

Enter the user's first name, last name, and email address.

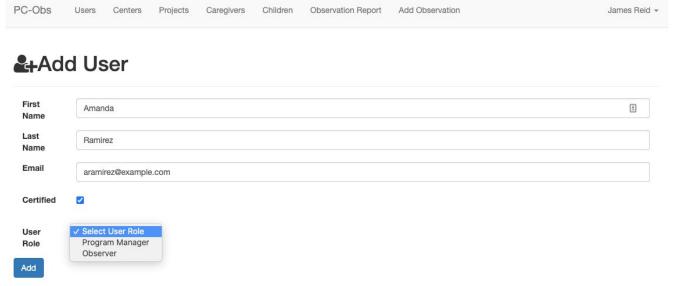


Enter the user's PC-Obs observer certification status. If the user is certified, check the box. If they are not certified, leave the box unchecked.

Add User



Select the user's role from the dropdown list: program manager or observer. Once you've added information in each of the fields (name, email, certification status, and user role), click the blue "Add" button to save your changes and add the user to the PC-Obs system. You will see "User successfully added" text highlighted in green appear at the top of your page.



How do I view, edit, or add Caregivers?

To view, edit, or add Caregivers, click on the "Caregivers" button from the dashboard homepage. You can also click on the "Caregivers" link at the top of page. From the Caregiver Administration page, you can view the list of caregivers that you've already added, edit the names, roles, and projects of existing caregivers, or add a new caregiver. If you need to delete Caregivers, contact the PC TALK team. Program Managers cannot delete Caregivers or Children from the data dashboard.



Add Caregiver		
Name		
521 HG		
Dave Test		
Emily Johnson		
Jennifer Clark		
Jimmy Test		
Libby Smith		
Mallory Test Teacher		
Michelle Garcia		

To view or edit user information, click on the caregiver's name from your list of caregivers on the Caregiver Administration page. Once you click on the caregiver's name, you will be directed to the Edit Caregiver page where you can see the caregiver's first name/ID, last name, role, and any projects, centers, and children they are connected to in the PC-Obs system. From this page, you can edit the caregiver's first name/ID, last name and role (teacher or parent/guardian). You can also add projects to the caregiver's account. To save your edits, click on the "Save" button. You will see "User successfully updated" text highlighted in green appear at the top of your page.



To add a caregiver, click on the green "Add Caregiver" button from the Caregiver Administration page. You will be directed to the Add Caregiver page where you will need to enter the caregiver's first name/ID, last name, and role (teacher or parent/guardian). You will also need to select the projects and centers that you want the caregiver assigned to in the PC-Obs system.

First Name/ID	521
Last	HG
Name	
Caregiver	Select Caregiver Role ✓
Role	
Projects	Select Project
,	Example Project
	PC TALK
	Project DX
	Colort Conto
Centers	Select Center JGP
	Little Adventures Child Care
	Entire / taventares of ma our
Add	

Enter caregiver first name/ID and last name. Select caregiver role (teacher or parent/guardian) from the dropdown list.

First Name/ID	521
Last Name	HG
Caregiver Role	✓ Select Caregiver Role Teacher Parent/Guardian
Projects	Select Project Example Project PC TALK Project DX
Centers	Select Center JGP Little Adventures Child Care
Add	

Select any projects from the list that you want to the caregiver assigned to in the PC-Obs system. You can select multiple projects by holding the shift key and clicking on each project.

First	521
Name/ID	
Last	HG
Name	
Caregiver	Teacher
Role	rodorioi
Hole	
Projects	Select Project
-	Example Project
	PC TALK
	Project DX
Centers	Select Center
	JGP
	Little Adventures Child Care
Add	

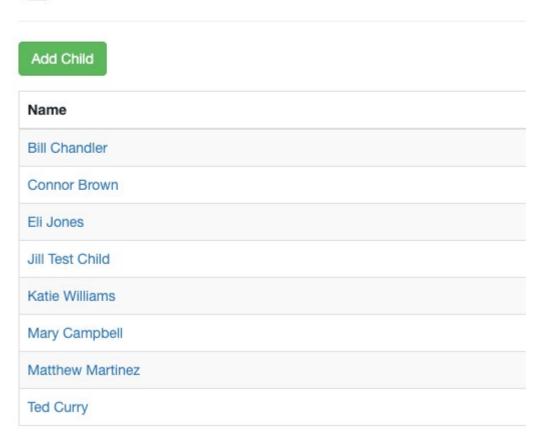
Select any centers from the list that you want to the caregiver assigned to in the PC-Obs system. You can select multiple centers by holding the shift key and clicking on each center. Once you've added information in each of the fields (first name/ID, last name, role, projects, and centers), click the blue "Add" button to save your changes and add the caregiver to the PC-Obs system. You will see "Caregiver successfully added" text highlighted in green appear at the top of your page.

First	521
Name/ID	
Last	
Name	HG
Name	
Caregiver	Teacher ~
Role	
Projects	Select Project
	Example Project
	PC TALK
	Project DX
Centers	Select Center
	JGP
	Little Adventures Child Care
Add	

How do I view, edit, or add Children?

To view, edit, or add Children, click on the "*Children*" button from the dashboard homepage. You can also click on the "*Children*" link at the top of page. From the Child Administration page, you can view the list of children that you've already added, edit the information of existing children, or add a new child. Program Managers cannot delete a child from a project. Contact the PC-Obs team at Juniper Gardens Children's Project if you need to do this.

Child Administration



To view or edit child information, click on the child's name from your list of children on the Child Administration page. Once you click on the child's name, you will be directed to the Edit Child page where you can see the child's first name/ID, last name, birthdate, and any projects, centers, and caregivers they are connected to in the PC-Obs system. From this page, you can edit the child's first name/ID, last name), and birthdate You can also add caregivers and projects to the child's account. To save your edits, click on the "Save Edits" button. You will see "Child successfully updated" text highlighted in green appear at the top of your page.

E+Edit Child

First Name/ID	Bill
Last Name	Chandler
Birthdate	2020-01-05
Add caregiver from existing	Add Caregiver Projects
project	Select a Project Project DX PC TALK Example Project

Edit

Projects

Title
Project Eagle

Centers

Title
JGP

Caregivers

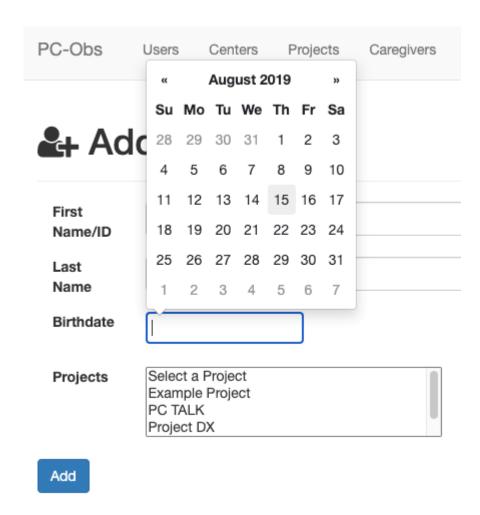
Name
Dave Test

To add a child, click on the green "Add Child" button from the Child Administration page. You will be directed to the Add Child page where you will need to enter the child's first name/ID, last name, and birthdate. You will also need to select the projects that you want the child assigned to in the PC-Obs system.

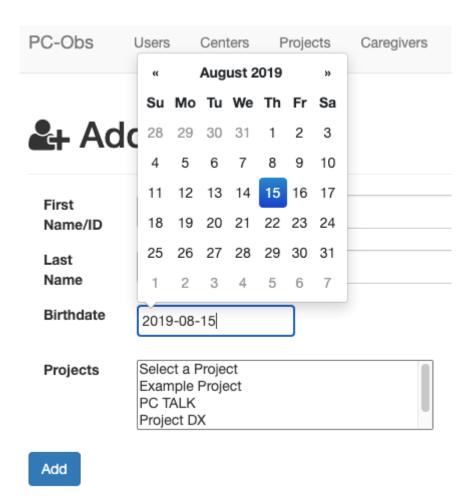
First Name/ID	701	
Last Name	YP	
Birthdate		
Projects	Select a Project Example Project PC TALK Project DX	

A -1 -1 O 1- !1 -1

Enter the child's first name/ID and last name. Click on the blank text box next to "birthdate" to enter the child's birthdate.



Use the pop-up calendar function to select the child's birthdate. You can also manually enter the child's birthdate using the YYYY-MM-DD format. For instance, if the child was born on January 17, 2020, you would enter 2020-01-17. We recommend using the pop-up calendar function to avoid birthdate entry errors.



Select any projects the list that you want to the child assigned to in the PC-Obs system. You can select multiple projects by holding the shift key and clicking on each project.



First	701
Name/ID	701
Loot	
Last Name	YP
Name	
Birthdate	2019-08-15
Projects	Select a Project
,	Example Project
	PC TALK
	Project DX
Caregivers	Select a Caregiver
Caregivers	521 HG
Add	

Select any caregivers from the list that you want to the child assigned to in the PC-Obs system. You can select multiple caregivers by holding the shift key and clicking on each caregiver.



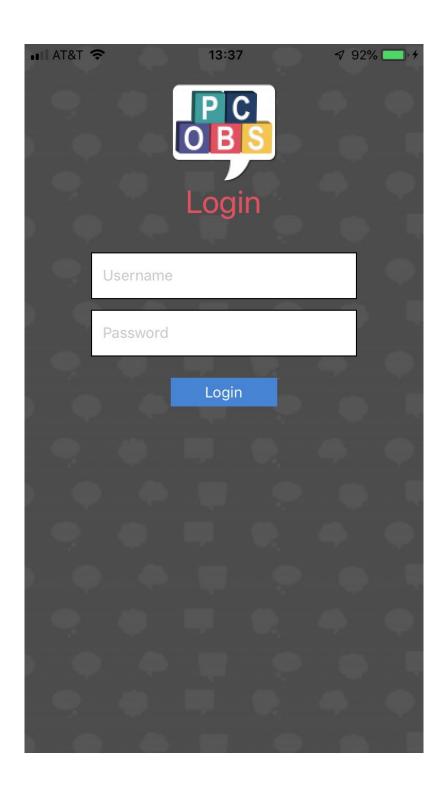
First	701
Name/ID	
Last	YP
Name	1F
Birthdate	
birthdate	2019-08-15
Projects	Select a Project
	Example Project
	PC TALK
	Project DX
0	Salast a Caraginar
Caregivers	Select a Caregiver 521 HG
	521 HG
Centers	Select a Center
	Little Adventures Child Care
Add	

Select any centers from the list that you want to the child assigned to in the PC-Obs system. You can select multiple centers by holding the shift key and clicking on each center. Once you've added information in each of the fields (first name/ID, last name, birthdate, projects, caregivers, and centers), click the blue "Add" button to save your changes and add the child to the PC-Obs system. You will see "Child successfully added" text highlighted in green appear at the top of your page.



First Name/ID	701
Name/ID	
Last	YP
Name	
Birthdate	[aa4a aa 45
Direitante	2019-08-15
Projects	Select a Project
	Example Project PC TALK
	Project DX
	i loject DX
Caregivers	Select a Caregiver
	521 HG
Centers	Select a Center
Ocincis	Little Adventures Child Care
Add	

Using the PC-Obs Mobile Application



Download App: Using the PC-Obs System App

Download App & Login



To download the app, go to Play Store (Android) or App Store (iOS). Search for "PC-Obs." Click "Install" (Android) or "Get" (iOS) and the app will begin downloading to the phone.

> 2. Once the app is finished downloading, open the app and enter Username and Password and then click "Login."



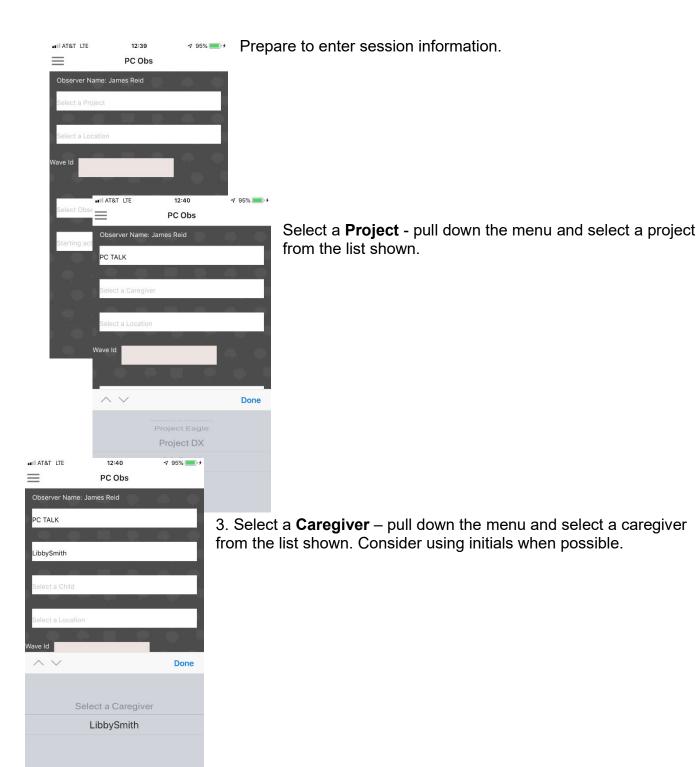
13:41

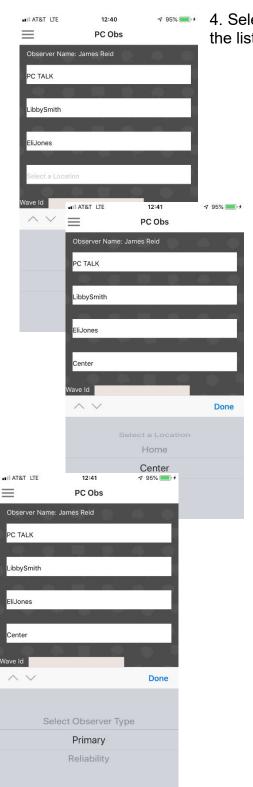
3. Click the green arrow to enter session information.

₹ 92% -+

Data Collection - Prepare to Observe

Prior to conducting observations, observers should first ensure that the Center, Project, Caregiver, and Child are entered into the PC-Obs data dashboard. Considering using Identification Numbers and caregiver and child initials, rather than full names, for additional privacy.

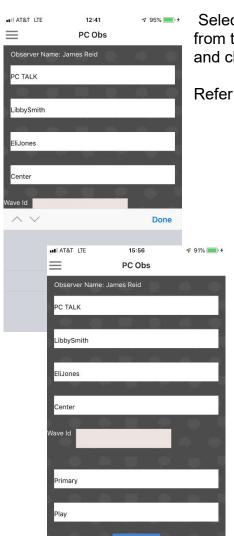




4. Select a **Child** – pull down the menu and select a child from the list shown. Consider using initials.

5. Select a **Location** - pull down the menu and select a location from the list shown.

6. Select an **Observer Type** – pull down the menu and select an observer type from the list shown.

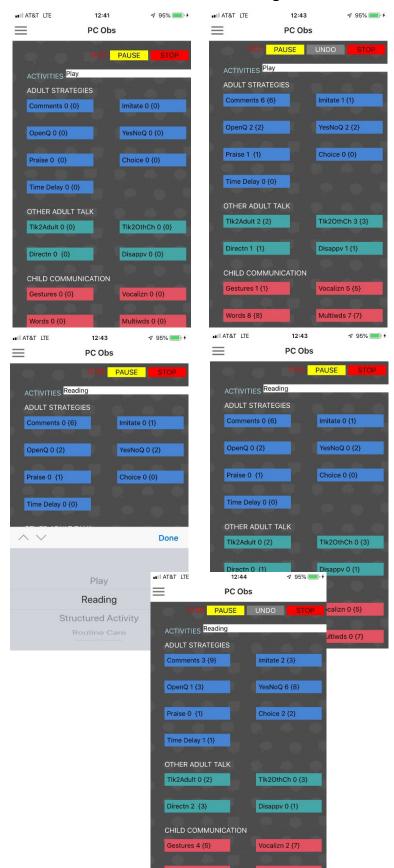


Select an **Activity** - pull down the menu and select an activity from the list shown. It should be the activity in which the adult and child are currently engaged.

Refer to page 10 for a list of activity definitions.

Click the **START** button to start the timer for the observation.

Data Collection - Adult/Child Strategies & Child Communication



The **ACTIVITY** shown at the start of the observation will be the **Initial Activity** selected BEFORE the timer starts.

All ADULT STRATEGIES, OTHER ADULT TALK, and CHILD COMMUNICATION buttons will be active, with their corresponding frequencies initially set at 0's.

Each time that a strategy or communication is observed, click on its corresponding button, and its frequency of occurrence DURING the current activity will be updated, right next to its corresponding button.

There is also an <u>overall</u> frequency of occurrences for all the strategies and communications across <u>all</u> activities. The numbers are displayed in parenthesis, next to the frequency in the <u>current</u> activity.

If there is a change in activity, pull down the **ACTIVITY** menu to select the new activity, and all frequencies for the currently activity will be rest to **0**, as shown.

As a strategy or communication is observed in this current **ACTIVITY**, click on its corresponding button, and its frequency of occurrence will be updated.

You may use the yellow **PAUSE** button to pause an observation – during this time, the timer stops, and the yellow **PAUSE** button changes to a green **PLAY** button.

All **ACTIVITY**, **ADULT STRATEGIES**, **OTHER ADULT TALK**, and **CHILD COMMUNICATION** buttons will be <u>inactive</u> during the **PAUSE** duration.

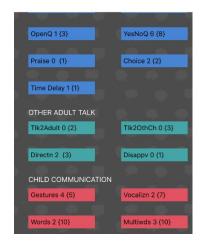
When you are ready to resume the observation, click on the green **PLAY** button, and the timer continues from when it was stopped by the **PAUSE** button, and all the buttons will become <u>active</u> again.



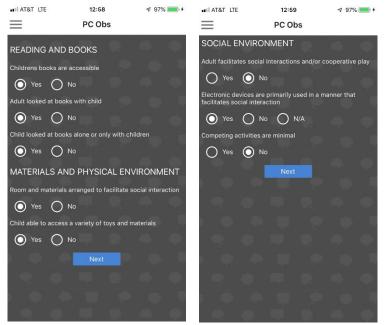
The observation session will end automatically when the timer counts down to **0**, after 15 minutes. Click the **OK** button to proceed to the **ENVIRONMENTAL ARRANGEMENT STRATEGIES**.

You may also stop the observation for any reason, before the session ends automatically, by using the red **STOP** button. You will then be taken to the **ENVIRONMENTAL ARRANGEMENT STRATEGIES**.





Data Collection - Environmental Arrangement Strategies



There are 3 groups of **ENVIRONMENTAL ARRANGEMENT STRATEGIES** on two screens for you to select your responses.

Click the **NEXT** button after selecting your responses to each of the question presented on each screen.

■■ AT&T LTE

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When you click the **NEXT** button after all the responses have been selected, you have the option to enter some notes.

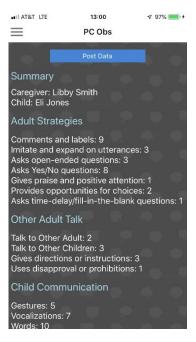
Click the **NEXT** button to complete entering notes, and the application will terminate.



12:59

PC Obs

√ 97% **−** +



Review the summary data and press **POST DATA** when you are ready to post the data to the dashboard.

Observer Certification & Reliability

All PC-Obs observers must complete a process of becoming certified before using the app to collect data. To be certified, the observer must score 85% on three interobserver reliability training videos. The provided Microsoft Excel PC-Obs Certification Calculator will allow the observer to self-score their observations and receive feedback. The calculator will identify areas that need to be reviewed if the observer is not yet certified, or let the observer know certification has been achieved. In addition to initial certification, it is recommended observers recode a training video annually to check for maintained reliability. Collect interobserver reliability data within your program, as well.

PC-Obs Certification Process

- 1) Select a video to code from: https://talk.ku.edu/pcobs/
 Scroll down to see the PC-Obs certification videos. It is recommended to use Video #1 to become accustomed to the app and use the remaining videos to establish reliability.
 Video #1 is a series of clips of different parents and children, but when coding, treat them all as the same child and caregiver.
- 2) Prepare your device (Android phone or tablet) for observation. Open the PC-Obs App and enter the required information. For Child ID, use 999 + Video Number. For example, if watching Video #1, enter 9991 as the Child ID. Video #2 Child ID will be 9992, etc. Enter 9s for the remaining required fields. Choose 30 minutes for the session length.
- 3) Press **Start Timer** in the PC-Obs App before pressing play on the video.
- 4) Code the video. In videos 3, 4, and 5, treat the videographer like a second adult and code communications to and from them, according to the instructions in the Promoting Communication Observation System manual. This will allow practice coding with multiple caregivers/teachers.
- 5) Press **Pause** in the PC-Obs app as soon as the video clip ends. If stop is pressed or the timer is allowed to run out, the observer will be unable to record scores.
- 6) Record responses on the Observation Table for Certification (Appendix C).
- 7) When ready to check scores, enter the scores into the Microsoft Excel PC-Obs Certification Calculator under the "Enter Totals Here" sheet.
- 8) After entering scores, click on the "Reliability Results" sheet within the Microsoft Excel PC-Obs Certification Calculator to check progress.
- 9) An observer is considered "certified" when a score of 85% on three of the videos is achieved. At that point, it is recommended to live code with another "video-reliable" observer at your site to make sure you are reliable with each other coding live. If not reliable, review definitions of highlighted areas of concerns within your "Reliability Results" sheet and recode videos.

Using the PC Observation Dashboard

What is the PC Observation Dashboard?

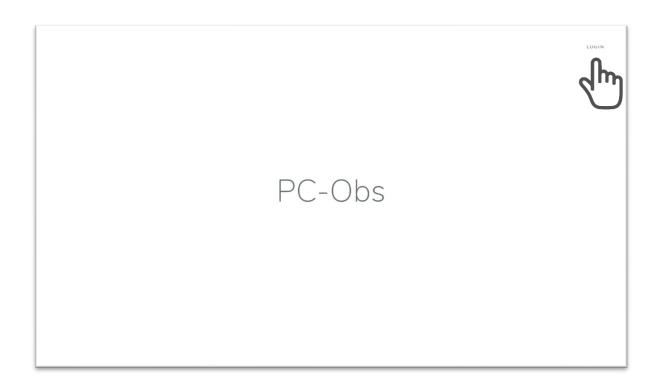
The PC-Obs Dashboard is a website used to gather PC Observation System observations from mobile devices onto a computer. Observations are comprised of two elements: Adult Child Data and Environment Data. Adult Child Data includes adult and child communications during the observation as well as information to identify the observation (IDs, dates, etc.). Environment Data includes information to identify the observation as well as responses to the questions the observer answers after the observation is completed.

How do I access the PC-Obs Dashboard?

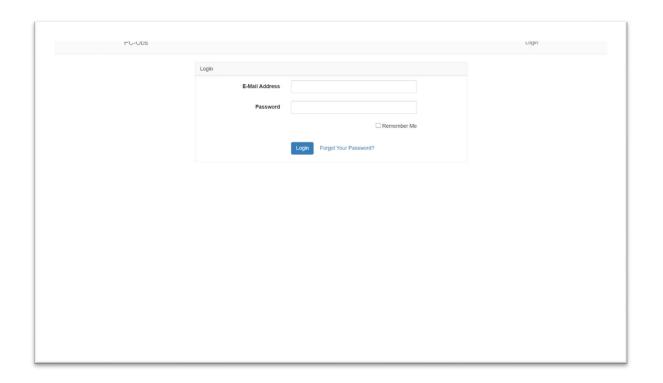
You can access the PC Observation Dashboard by opening your internet browser, going to the dashboard website (http://pcobs.ku.edu/), and logging in.

How do I login and logout of the PC-Obs Dashboard?

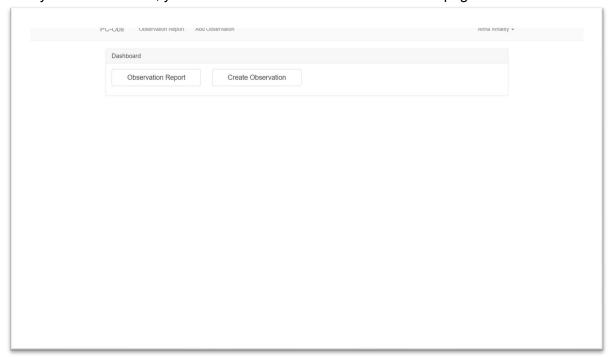
To login into the dashboard, go to (http://pcobs.ku.edu/) to access the dashboard landing page and click on "LOGIN" in the upper right corner of your screen.



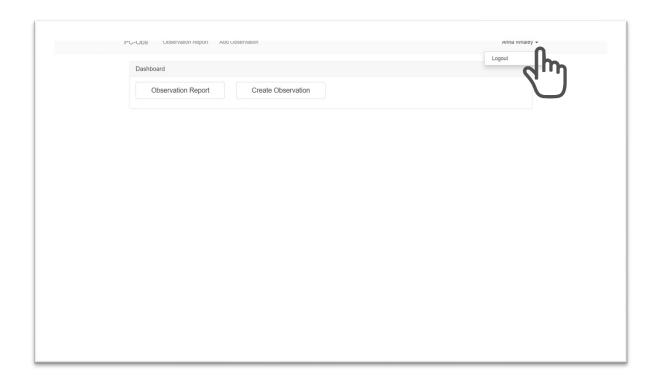
Once you click on "LOGIN", you will be prompted to enter your login credentials, which are your email address and password. Enter your credentials and click the blue "LOGIN" button.



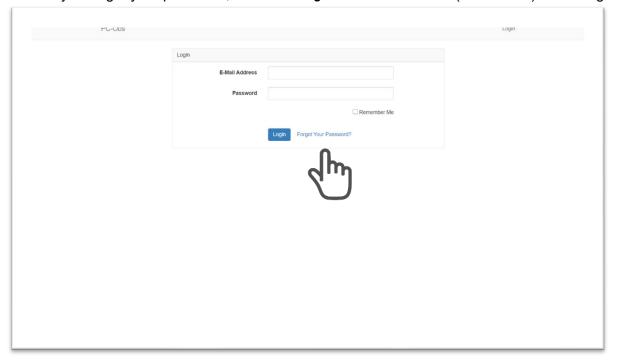
After you click "LOGIN", you will be directed to the dashboard homepage.



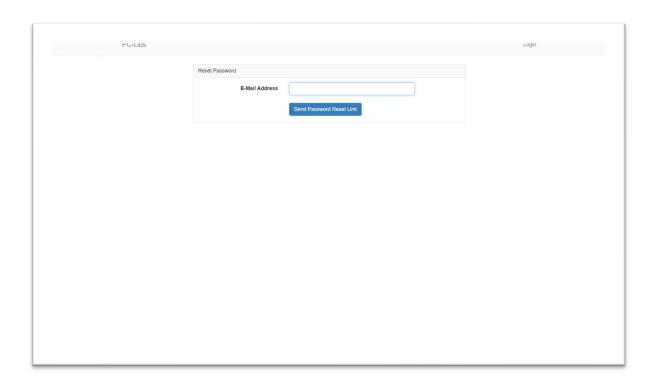
To logout of the PC Observation Dashboard, click on your name the upper right corner. Once you click on your name, "Logout" will appear in the dropdown menu. Click on "Logout" and you will be logged out and directed to the landing page.

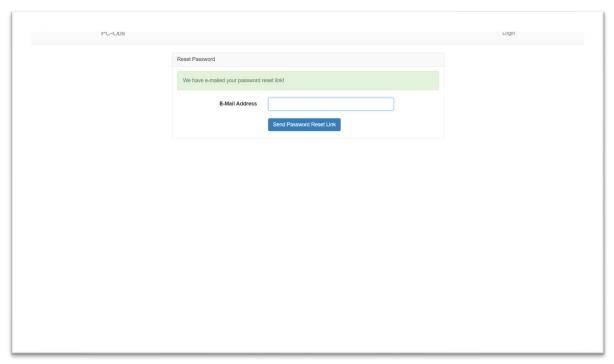


Note: If you forget your password, click on "Forgot Your Password?" (in blue text) on the login page.

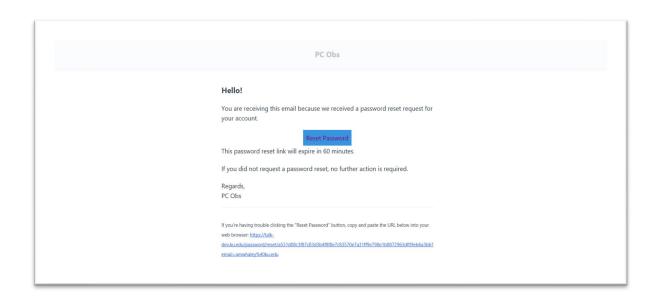


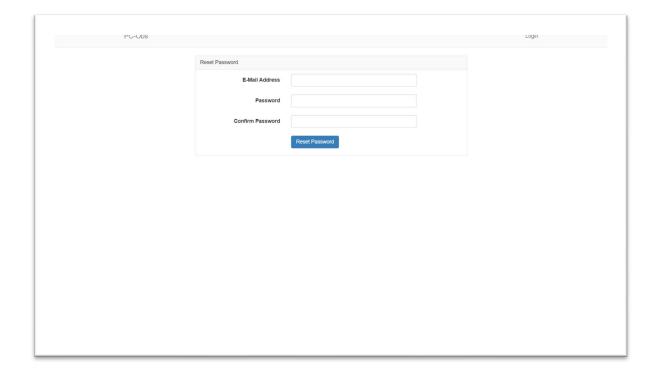
Enter your email address and click on the "Send Password Reset" Link button.





The reset link that is emailed to you will expire after 60 minutes. Go to your email and click on the "Reset Password" link (highlighted in blue).

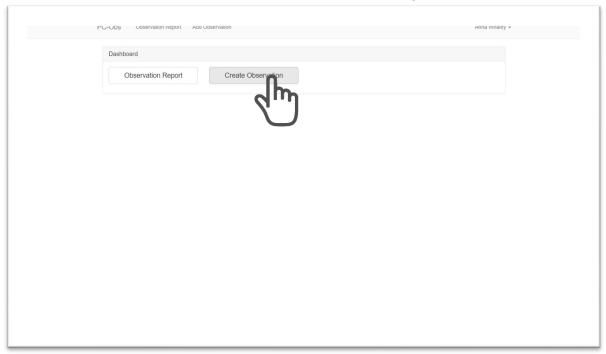




PC-Obs Dashboard Instructions for Observers

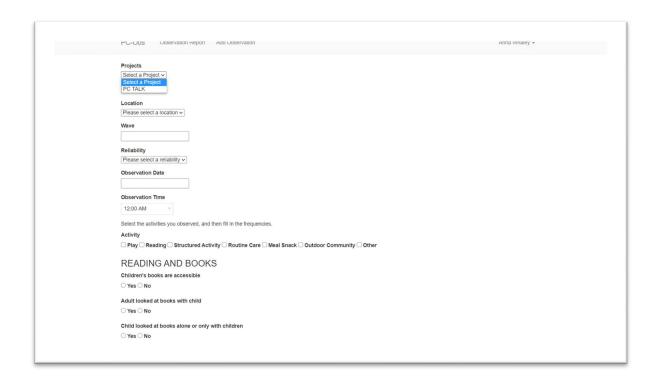
How do I add an observation (from the paper form)?

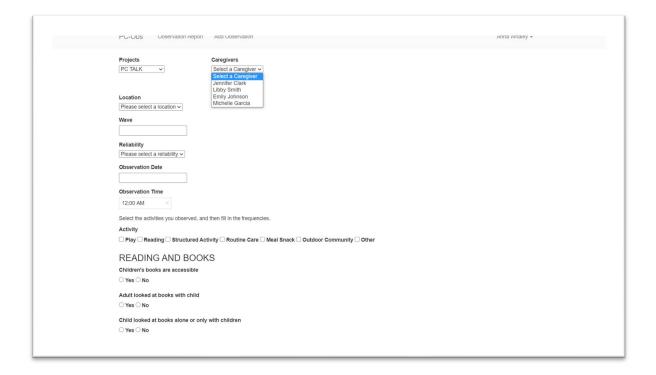
To add an observation, click on the "Create Observation" button from the dashboard homepage. You can also click on the "Add Observation" link at the top of the page to add an observation.

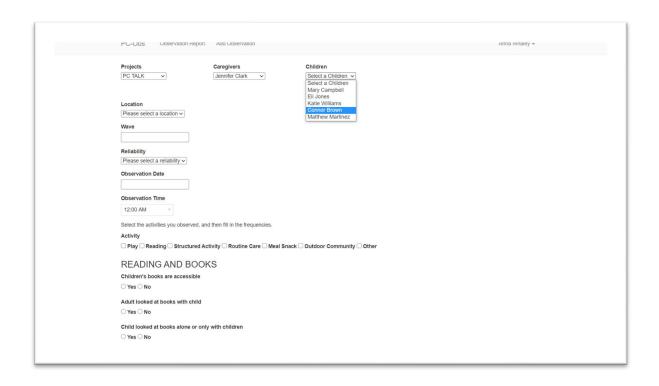


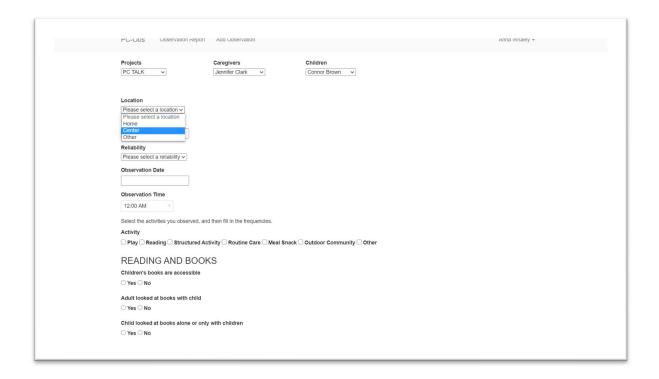
Note: If are viewing an observation report or have just entered an observation from paper form, you will always find the "Add Observation" link at the top of any page you are viewing in the dashboard. You can click on it to add another observation.

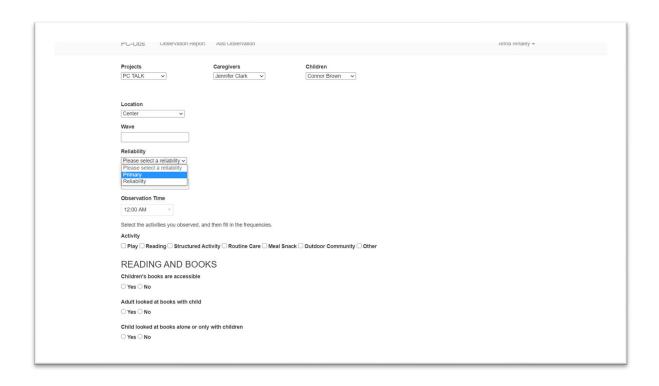
Select the project from the **Projects** dropdown menu.

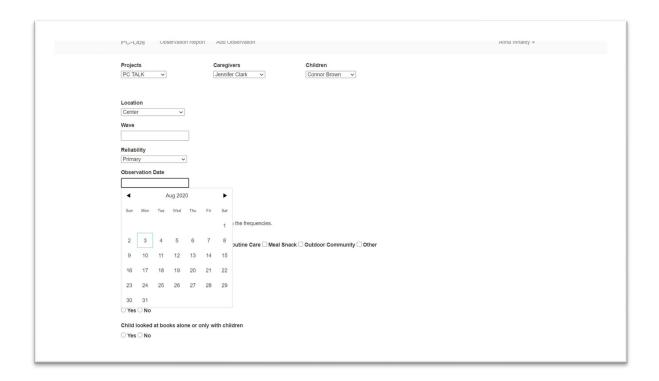


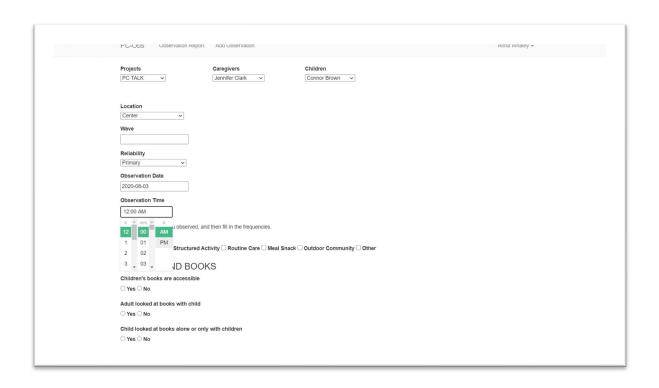


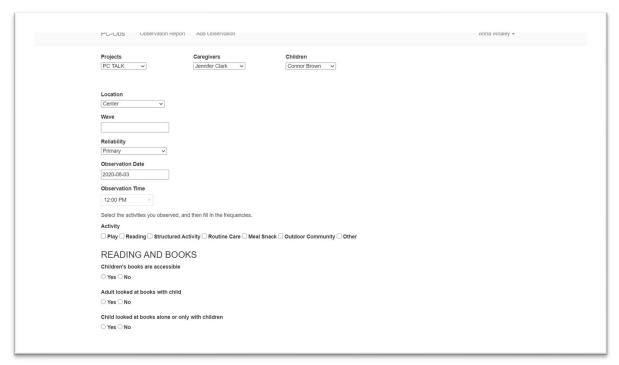








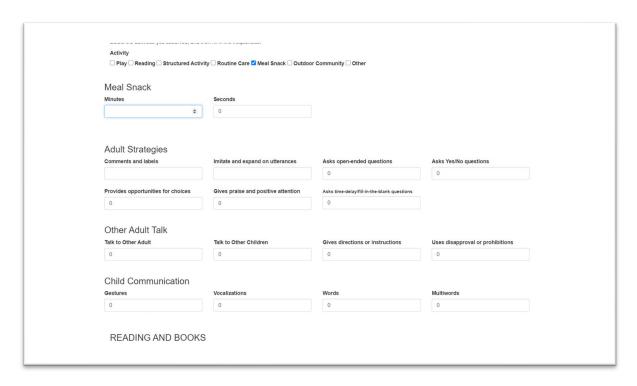


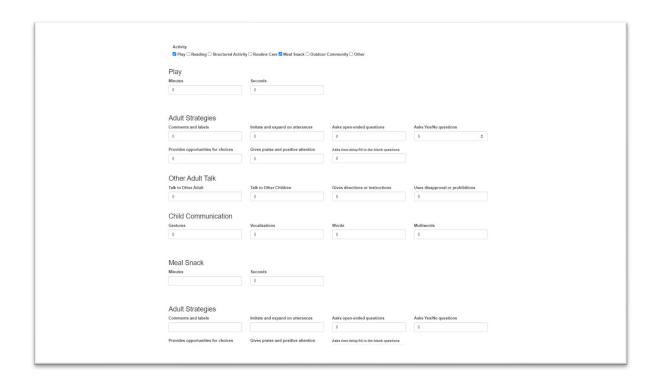


After you select your activities, blank boxes will appear to enter the duration of each activity, as well as the frequency (or counts) of each adult strategy, other adult talk, and child communication.

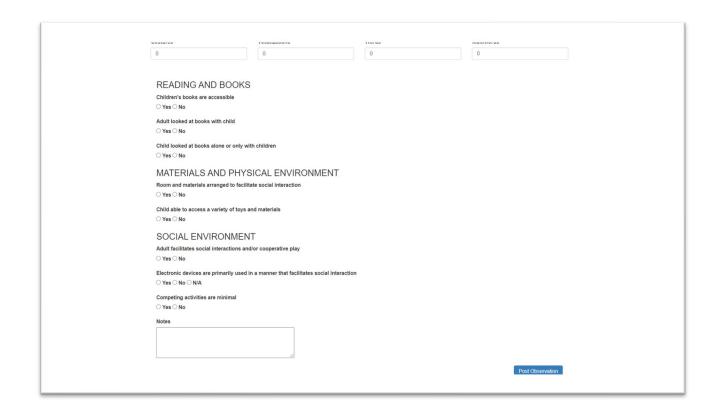
Enter the duration of the observation (in minutes and seconds) for the first activity you checked. For instance, if Meal Snack was the only activity that you selected from the list, then Meal Snack will be the only activity that appears for data entry.

Enter the frequency counts for each adult strategy, other adult talk, and child communication. Each blank is auto-filled with a zero. You must manually enter a number in each box, even if that number is zero, in order to post the observation.





Once you have entered the duration and frequency data for each observed activity and answered the environment questions, click on the "Post Observation" button (in blue) to save the observation in the dashboard.

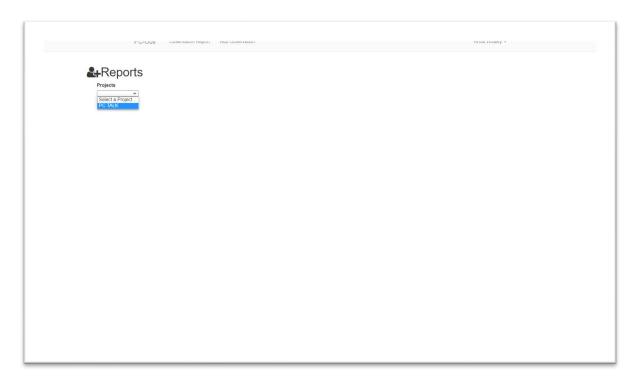


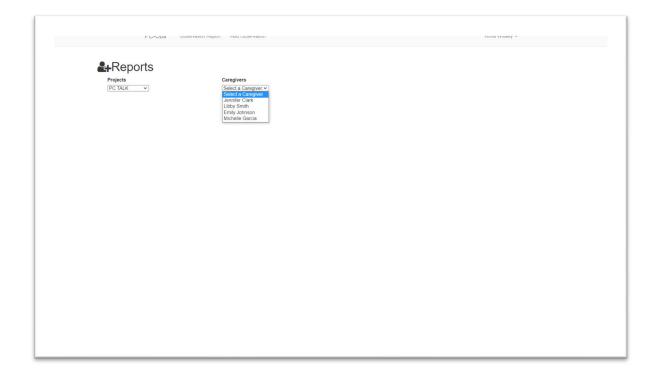
To view an observation report, click on the "Observation Report" button from the dashboard homepage. You can also click on the "Observation Report" link at the top of the page to view the observation report.

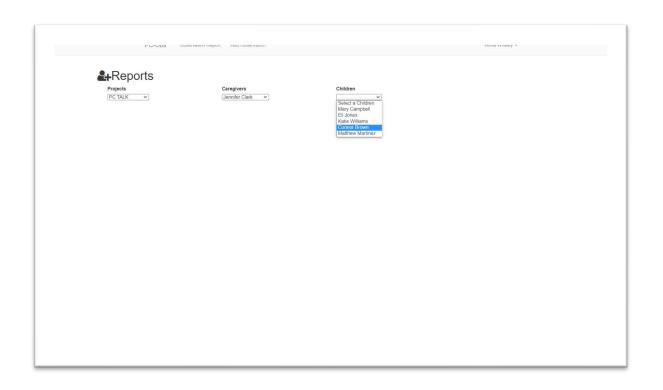


Note: If are already viewing an observation report or have just entered an observation from paper form, you will always find the "Observation Report" link at the top of any page you are viewing in the dashboard. You can click on it to view an observation report.

Select a project from the **Projects** dropdown menu.

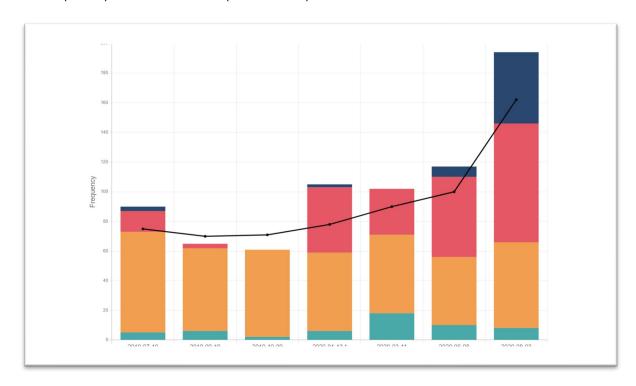




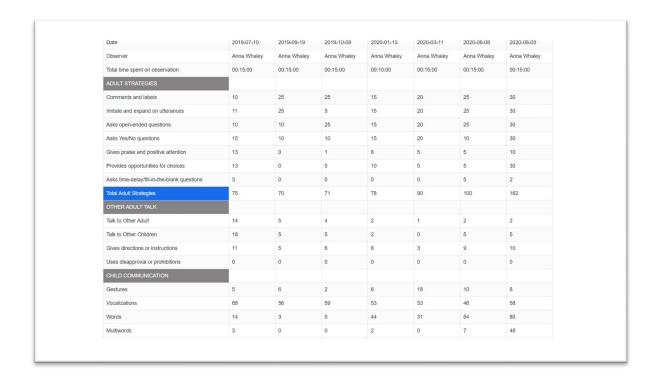




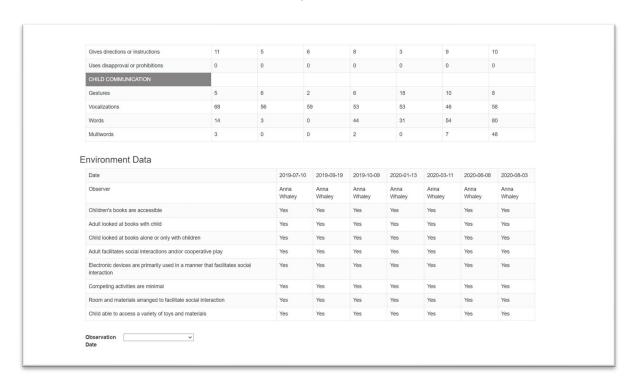
observation dates. Child communication is represented by the colored bars; caregiver strategies are represented by the black dotted line. All caregiver strategies are combined into one data point per observation, whereas child communication is divided by gestures (in green), vocalizations (in yellow), words (in red), and multi-words (in dark blue).



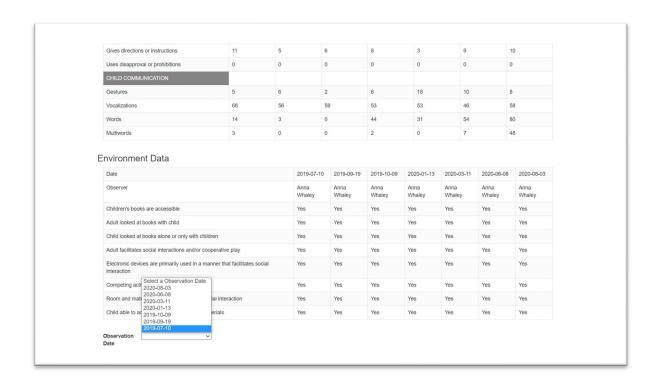
Below the adult and child progress chart, you can view a table that shows the date and duration of each observation; the observer; and the frequency counts for each adult strategy, other adult talk, and child communication.



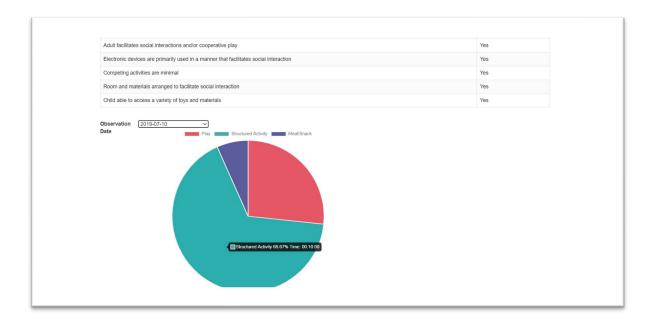
Below the table of adult and child behavior, you can view environment data for each observation date.



To view a breakdown of activities that were observed in each observation, select an observation date from the **Observation Date** dropdown menu.



Once you select an observation date, you will be see a pie chart that shows the percentage of time in which the adult and child engaged in each activity over the entire observation. For instance, in the chart below, the child was observed during play, structured activity, and meal snack. Of those 3 activities, most of the observation occurred during a structured activity. You can hover over each colored area of the pie chart to see the percentage and duration. In this example, the structured activity was 66.67% of the observation and 10 minutes in duration.



Observer Information: PC-Obs Caregiver Instructions & Definitions

Observer Instructions: Preparing for the Observation

The caregiver and child behavior will be recorded simultaneously for the entire observation length. During the observation, you will be documenting adult and child communication and interaction. You will also record the activities in which the adult and child are engaged. At the completion of the observation, observers answer questions related to Environmental Arrangement Strategies and complete any notes related to the observation.

Instructions to provide to the Adult Caregiver(s) being observed: Please explain that we are interested in observing how they typically interact, play, and talk with the child for 15 minutes (or the length of your observation, if different). The adult and child are free to choose the activity, although indoor activities generally work better than outdoor activities. Observed activities might include play, book reading, meals or snacks, diaper changing or toileting, dressing, meal preparation, or circle time in center-based care.

Identifying the Observation: Prior to beginning the observation, complete the appropriate fields in the mobile app or on the paper form to identify the child, observer, wave, location, program, and whether interobserver reliability data are being collected. The "program" field can be used to identify any special programs, groups, classrooms, or populations that you identify within your own program. Please see page 32 of this manual for instructions, and page XX of the manual to see how your definition of "program" affects the graphs you can produce.

Prepare to Observe: Use the "Initial Activity" drop down menu to select the activity in which the adult and child are currently engaged.

Observe: During the observation time, record each strategy used, according to the behavioral definitions provided in this manual. Any information you observe that is pertinent to the observation can be logged in the "Comments" section after the observation. Following the observation period, complete the Environmental Arrangement questions. Click "submit" to complete the observation and ensure the data will be uploaded to the PC-Obs data dashboard the next time your device is connected to the internet.

After the Observation: You may collect as many observations you wish before sending your observations to be uploaded to your database, but we recommend uploading at least every two weeks. When you are ready to upload your observations, simply connect your device to the internet via wifi.

Observer Instructions: Observation Definitions

Activity Definitions: As part of the observation, the observer will identify what type of activity is being observed and record when/if that activity changes. Please use the following chart when determining which activity you are observing.

Activity Menu	Definition
Play	Child is playing indoors by self or with others.
Reading	Child is looking at or playing with books by self or with others, being read to in group or individual setting, etc.
Structured Activity	Organized activity in which caregiver initiates or directs planned activity. Examples included circle time, caregiver-led art project, cooking activity, etc.
Routine Care	Diaper changing, toileting, dressing, hygiene, etc.
Meal/Snack	Child is primarily engaged in eating and/or drinking.
Outdoor/Community Activity	Any activity taking place outdoors or in the community (outside of home or classroom).
Other	Please specify "Other" in text box at end of environmental items. You may decide as a group to use this as a set category to collect data on a specific activity, such as transitions, or use it to indicate the activity does not fall into any of the above options. It is helpful to make a note of what the "other" activity is in the comments box at the end of the observation.

A. Adult Talk

When coding items under Adult Strategies, record the frequency of occurrence of the following behaviors during the observation period.

ADULT STRATEGIES

A1. Comment and Label (Comment)

Caregivers provide comments about and/or labels people, things, and objects to which the child is attending, or when caregiver comments on child's actions. Caregiver describes what the child is doing as the child is pushing a toy car; describes what is outside the window in response to the child's pointing, or labels the toys to which the child gestures toward). Comment should also be coded if the adult comments about what the adult is doing with or to the child (e.g., "I am going to help wipe your nose," or if the adult comments on what the adult is doing during some joint activity, "We are going to wash our hands," "We are running so fast.") Each utterance of a comment or label should be coded.

Examples:

- When the child is playing with a toy, the caregiver describes it (e.g., "That truck has four wheels," "...is blue," or "...goes back and forth.")
- Caregivers use single word labels to describe toys or activities (e.g., "truck") when

- the child is playing but not talking.
- Caregiver describes the children's current activities (e.g., caregiver says, "Look how you are making that blue color with your brush").
- Caregivers name objects to which the children point (e.g., toddler request the ball by pointing at it and the caregiver says, "Jane wants the big blue ball").
- Caregiver describes what they are doing with the child (e.g., lifting the child's leg or arm to help them dress, brushing their hair etc.).
- Caregiver says, "Here it comes!" while pushing a toy car toward child.
- Caregiver says, "I'm walking with you over to your friends so you can play with blocks too." (CG comments here on her action with the child)
- Child is standing at the window and looking outside. The caregiver says, "It's such a beautiful day."
- Caregiver responds to a child's singing by saying, "I didn't know you could sing."
- Caregiver labels letters of the alphabet while looking at letters in a book or on a toy. This is coded as a "comment/label" if the adult has a referent (i.e., a book, letters on blocks, letters on TV, etc".
- "B is for butterfly" is coded as one comment/label.
- Child points to a letter and CG says letter is coded as one comment/label.
- Counting objects or reading numbers is scored as "comment/label".
- While pointing to 3 separate pictures of balls in a book, CG says "One... two... three." This is coded as three comment/labels.
- Caregiver talks to the child what she/he is doing with the child. "It's ok, I will be gentle," while wiping nose.
- When adult is reading a book with the child: the text that is already in the book is not coded, however if the adult describes any of the text or adds information about the book that would be coded under Comment/Label.

NOTE: ABCs and 123s

- Reciting them in a series (without a breath between each number or letter), or singing them, without pauses between numbers or letters is scored as 1 instance of "LABELING" with or without a referent (e.g., with pictures of letters or numbers or without).
- "A" (points to A), "B" (points to B), etc (each letter is scored as a one comment/label). So, if the caregiver labels each letter of the alphabet, this would be tallied as 26 comment/labels.
- CG says, "One, two, three, four, five, you have five toes." (while pointing to each toe), this is coded as 6 comment/labels (one for each number, and then one for "you have five toes.")
- If reading a book about ABC's or numbers and caregiver expands upon ABC's or number sequence by adding additional comments, questions, expansions then code accordingly.
- The key distinction is going to be if the caregiver is referring to something. To be scored as a label, it needs a referent (written letters or numbers, objects, fingers, etc).

A2. Imitate and Expand (Imitate)

Caregivers imitate or expand upon the child's utterance by repeating what the child says (imitate) or adding additional information to what the child has said (e.g., C: "Up?" CG: "You want up please" "You are going way up high") (expand). Expansions are a repetition that adds content or grammatically to an immediately preceding utterance. Part of the utterance is identical or similar to the preceding utterance and part is an addition of a word or phrase. Also includes when caregivers imitate or repeat the child's vocalization and/or utterance. The imitation should be an exact repetition, or almost an exact repetition, of what the child vocalized or said.

Examples

- The child says, "Baby." The adult repeats, "Baby."
- The child says something and the caregiver adds clarification or more complex grammar to what was said (e.g., Child says "Truck" and the CG says "Yes, that is a blue truck").
- Child says "Baa" and CG says "Bottle, here is your bottle."
- Child says "I want" and CG says "You want that" or "You want your blanket."
- Child says "Clouds" and CG says "Yes, those are clouds in the sky."

A3. Open-ended or "wh-" questions (OpenQ)

Caregiver asks open-ended questions (e.g., "What do you see?", "Who...", "When...", "How...").

Examples of "wh" or open-ended questions:

- Caregivers ask child who what, when, where, why and how questions. "Where's your nose?" "Why did the fish feel sad?" "How old are you?"
- "What?" or "huh?" when the adult did not hear what a child said and is asking the child to repeat him or herself.
- "What do you want to do?" "What do you want?" "What do you like?"
- When caregiver is reading a book with the child: if the caregiver asks questions that are NOT already in the text of the book each question is coded as responsive.
- Forced choice questions should be coded as Providing Choices, <u>not</u> as "wh-" or "open-ended" questions. Examples of forced choice questions include: "Do you want apple juice or milk?" "Should we play with blocks or puzzles?"

A4. Yes/No, or Closed-ended questions (YesNoQ)

Caregiver asks Yes/No questions (e.g., "Do you want some juice?"). These are questions that, grammatically, would be answered with a "yes or no" answer. Requests for language that are phrased as a "yes/no" question should be coded as a "yes/no" question (e.g., "Can you say 'baby'?"). Using a question inflection without the correct syntax should also be coded as a question ("baby in the mirror?")

Examples of "yes/no" or closed-ended questions:

- "Are you a big girl?"
- "Do you want juice?"

- "Can you come here?"
- "Can you do that?"
- "Ready?"
- "Is there something you want to do?"
- "You want to play?"
- "Are you driving the car?"

A5. Praise and Positive Feedback (Praise)

Caregiver uses praise or positive feedback, including compliments when addressing the child on his/her behavior. Praise may be general or specific (e.g. "good job," or "I like the way you stacked those up"). Positive feedback includes all positive statements such as, "You look nice today in that red shirt," "I like how you are playing," "Wow! Great job." Prosocial comments (e.g., "Thank you," "You are welcome," and "Bless you") also fit under positive feedback.

Examples:

- Caregiver states how much he/she likes the way certain children are acting (e.g., "Jane is sitting quietly," or "John is doing a nice job sharing the crayons").
- Caregiver says nice things about the child (e.g., "You're such a beautiful girl," or "I like how you are sharing the crayons so nicely.")
- Caregivers tell children what they did correctly (e.g., "Johnny put his coat on all by himself,") or otherwise compliment behavior.
- Caregivers use positive words such as, "You ate your breakfast, great!"
- Caregiver says, "Good." "You are my sweetie," "I like how you are playing with Cathy."
- "Wow!"
- Infant is looking at CG, and CG says to an infant, "You love me, I love you too."

Examples of Prosocial Comments include:

- Caregivers use formalized and polite words such as "please," "thank you" and "you are welcome". For example, while the cg passes out food to each child, her/she says "thank you" to promote the use of those prosocial words.
- If "please" or "may I____?" is used as part of a question, it is coded as a question, rather than Praise and Positive Feedback.

A6. Choices (Choice)

Caregiver verbally presents a choice to the child, providing opportunities for the child to communicate their preference or selection. Choices should be explicit, and verbally stated.

Examples

- Caregiver asks, "Shall we paint with the red paint or the green paint?" or "Do you want to sing Old MacDonald or Twinkle Twinkle?"
- If questions are rephrased to become more specific, they may be coded as both *Questions* and *Providing Choices*. For example, "What do you want to drink? Do

- you want apple juice of milk?" would be one instance of a question and one instance of choice.
- During play, the caregiver provides the child with opportunities to choose one
 activity out of many (e.g., when caregiver states that the child or children can
 choose one of four centers to play in, or one room or activity, <u>one</u> choice should be
 coded.
- During mealtime the child is given the opportunity to select from several different foods that the caregiver presents to him or her (e.g., caregiver says, you may choose chocolate chip or peanut butter). Note: If the foods (or toys) are all just placed on the table and the child can take any of them, this would <u>not</u> be coded as Choice.
- During reading time, the caregiver asks the child to select the book to be read from two or more books.
- During reading time, the caregiver gives the child a choice between reading the book with the caregiver or reading individually.
- Simply saying "What do you want" is not a choice. This would be coded as an open-ended question.

A7. Time Delay (TimeD)

Caregiver uses time delay or "fill in the blank" to promote communication. Time delay is coded if the caregiver inserts a pause either before or inside of an utterance to the child. For example, the caregiver may pause briefly after presenting a toy to a child to wait for the child to ask for assistance to work the toy, or the CG might begin a familiar rhyme or story, and then insert a pause to let the child fill in the missing word(s) (e.g., "Twinkle, twinkle, little ____").

Examples

- During routine care or diapering, the caregiver might say, "These are your arms; These are your...." and then wait for the child to say fingers as the teacher is pointing to the child's fingers.
- While reading familiar stories, the teacher may pause at points in the book where
 the child is familiar with the story, giving the child the opportunity to finish
 sentences or name familiar characters or items in the pictures. For example, while
 looking at a book of animals, the teacher might point to the tiger, and then say
 "here is the....", giving the child the opportunity to say "Tiger."

OTHER ADULT TALK

A8. Talk to Other Adult(s) (Tlk2Adult)

Caregiver who is currently interacting with the target child, or in closest proximity, is talking to adults. This might include classroom planning discussions, coordination of ongoing activities or care, talk unrelated to child or classroom activities (e.g., social talk), or talking on the phone (e.g., cell phone and classroom phone). Code each utterance or sentence as one instance of "talk to other adult." Each sentence or utterance is tallied. A longer utterance consisting of two sentences counts as two

behaviors in this category (e.g., "Did you change Ethan's diaper? He seems fussy" is counted as 2 behaviors in this category.)

A9. Talk to other child(ren) (Tlk2OthCh)

Caregiver talks to other children, and this does not include the target child. Code any talk that is directed to any child(ren) other than the target child, and not directed at the target child, regardless of content or topic. Note that talk that is directed to a group of children that includes the target child should be coded as talk directed to the target child, and NOT as "talk to other children." Code each utterance or sentence as one instance of "talk to other child." Each sentence or utterance is tallied. A longer utterance consisting of two sentences counts as two behaviors in this category (e.g., "Are you hungry? What did you have for breakfast?" is counted as 2 behaviors in this category, as long as it was directed at a child who is not the target child for this specific observation).

A10. Directions, Instructions, or Requests for Language (Directn)

Caregiver provides directions, instructions, or requests for language to the target child. This is coded when the caregiver is instructing or directing that a child do some action (e.g., "Come here right now" or "Give that to me please.") This includes instances when the CG directs the child to action as in "Go put the toys away" or when the CG instructs the child to say something or to vocalize (e.g., "Say ball"). This includes directions that are given in a positive, neutral or negative tone. For instance, "Stack this block" during play, and "You sit down!" in a scolding tone are both coded here.

Examples of Directives:

- Caregiver asks the child to "Say Mama," "Say dog," "Say all done" "Say you are sorry to her, it isn't nice to hit our friends."
- "Come here please."
- "Put that down," "Give that back," "Sit over there."
- "Hurry, hurry, hurry" while running to go outside and laughing.
- "Come on, come on, come have a seat" while having children come to the table.
- "You need to come with me to the bathroom."
- "Let's go sit down" or "Let's clean up now." "Let's go to bed." "Let's go change your diaper."
- "Let's play a game."
- "Come on, let's say our ABCs." Or "Come on, you do it."
- "Look at that!" "Look at the bird!" "Look, there's a car" (even though its function may be to label an item, if the adult is telling the child to look at something, code this as a directive.)
- "You do it" or "Do it for me"
- Note: There may be instances in which the CG says a child's name as a way of
 directing them to do something (e.g., Alex, go get your coat on but the CG only says
 "Alex" because they had already given a general direction to the class. This would be
 coded as a Directive. In cases where the CG says the child's name to have them stop
 doing something ("Alex!" when the caregiver wants the child to stop kicking the wall,

this would be coded as Prohibition).

- Caregiver says, "Give that to me now! "You get over here now!"
- "Say you are sorry to her right now, you don't bite your friends!!" said in a overly harsh manner while standing over the child and pointing. (Coded as one Directive and one Prohibition even though they run together when the CG says it).
- Caregiver says, "It's not your food" or "That's not safe" to discourage certain child behaviors.

A11. Disapproval, Prohibition, Negative Talk (Disappv)

Disapprovals, prohibitions, or negative talk is coded if the caregiver says something to the infant/child that indicates that the child should stop some activity or to stop saying something. Negative talk includes comments or questions that criticize, belittle, or shame the child, that are sarcastic, that indicate that the child is doing something on purpose to make the CG angry, or that is said in an angry or frustrated tone of voice or with negative affect and/or negative nonverbal behavior (e.g., roll eyes). Adult statements referring to disciplinary actions are also coded in this category.

Examples of Prohibitions:

- Caregiver says, "No!" "Don't do that," "Get away from here."
- "Shut up"
- "Bye" (When CG uses this to indicate the child should leave).
- "Quit saying that"
- "Stop singing that song."
- "You better put those down!"
- "You better not think about doing that!" (as child is about to do something the adult does not want the child to do).
- "I don't want to see that."
- "Alex!" (CG says child's name in a tone indicating they want the child to stop doing something). Note: There could be instances where the CG says the child's name to have them stop doing something and other times when the CG says the child's name to have them do something as in (Alex, go get your coat on but the CG only says "Alex"). In the second example, this would be coded as a Directive.

Examples of Negative Feedback or Negative Talk:

- Caregiver says, "You are not a nice girl today."
- "You're whining again." "Stop your complaining."
- Caregivers state how much they dislike the way certain children are acting (e.g. "Once again Jane is not sitting in her chair").
- Caregivers say negative words about children (e.g., "You are being bad").
- "You are just doing this to make me angry."
- "You are being mean today."
- "Mommy doesn't want to play with you anyway" in a sarcastic tone.
- Caregiver says the following in an angry tone, "You need to listen to me! You're being bad!"
- Caregiver says, "You eat what's on your plate and don't ask for anything else!"

Examples of Disapproval:

- "I don't like it when you hit."
- "You make me so angry. You need to listen!" (disapproval and instruction)
- "Didn't you just go?" (When child asks to go to the bathroom and CG responds with frustration and displeased facial expression).
- "I'm not playing this game!" (in response to child misbehavior).

Examples of Discipline Statements:

- "You are in time out, go over and sit down."
- "You come over here and think about how we treat our friends."
- "I'm going to get the belt!"
- "You're getting a spanking."
- "I'm going to take those away."

Non-Coded Talk

Caregiver talk that does not fit into any of the above categories is **not** coded.

Examples:

- Child is looking at a book. Caregiver sits down and says, "It's such a nice day."
- Child is sitting on the potty. Caregiver says, "I'm so sleepy."
- Phrases, such as "here you go," "here," "there you go," "Yeah," or "OK."
- Filler words, such as "mm-hmmm," "uh-huh," "mmmm," "uh-huh," "uh-uh."
- Caregiver is talking to self.
- If child/caregiver drops something and caregiver says "Uh Oh" this is not recorded. If caregiver says "Uh Oh, you dropped the toy" this is recorded as a comment.
- Caregiver recites alphabet or numbers, without referring to letters or numbers (e.g., written, signed, actual items). For example, "One, two, three, four, five" without referring to actual objects, or numbers in a book. The main determinant of whether counting or the alphabet is scored or not is whether there is a referent.

B. Child Communication

B1. Gesture (Gestures)

A physical movement made by the child in an attempt to communicate with a partner. Count each instance of a gesture.

Examples:

- Giving or showing objects
- Pushing away or rejecting an object
- Reaching toward a partner or object the partner is holding
- Pointing toward an object or person
- Nodding or shaking one's head, shrugging shoulders.

B2. Vocalization (Vocalizn)

A non-word verbal utterance voiced by the child may be directed toward a partner or to themselves. An episode ends when there has been a clear break of at least one second without vocalization. One second or breath in between vocalizations distinguishes different vocalizations. Laughing is scored as a vocalization. Score one laugh as one vocalization, but if the child takes a breath and begins laughing at something else that is funny, score this second laugh as a second vocalization. To score laughing, if the child takes a fairly large deep breath or pause (like they are waiting for the play partner to do something "funny" again), and then starts laughing again, this would count as a new vocalization. If they take just a quick little gasping breath and keep laughing at the "same" thing, this would count as one vocalization. Crying should not be counted as vocalizations.

Examples:

- Animal sounds, e.g., moo, when looking at a cow
- Transportations, motor sounds, e.g., vroom when pushing a tractor
- Blows to ask for more bubbles
- Sounds such as "ah," "da," "eee," etc.
- Sounds such as "mmm," or "um."
- Laughing at the play partner's actions

B3. Words (Words)

Single-word utterances voiced by the child that are understood.

Examples:

- Child says "car."
- A vocalization in which only one word is understandable
- Continuous sequential repetition, e.g., go, go, go" (code only one)
- Compound words, e.g., "mailbox," "necklace" (code only one)
- Ritualized duplications, e.g., "bye-bye," "uh-oh," "night-night" (code only one)
- Two-part proper names, e.g., "Big Bird," "Mary Jane"

- Sequentially describing or naming objects, e.g., "block, red, blue, girl" (code one for each word.
- Standard sign language, code as appropriate single words
- A child hits a switch on an augmentative communication device to indicate "more" or "yes."
- Answering a question with "uh-huh" as a "yes" response, or "oh" in response to a statement. *Other responses that are not considered true words are coded as vocalizations (e.g., "mmm" or "um").

B4. Multiple-word utterances (Multiwds)

A multiple-word utterances is a combination of two or more different words voiced by a child that are understood. An utterance consists of a sentence or a single thought.

Examples:

- Words should fit together in a meaningful way, e.g., "big truck"
- Does not need to be grammatically correct, e.g., "Me go to store."
- Does not need to have adult meaning, e.g., "Cow rides tractor"
- Standard sign language, code as appropriate for multiple-word utterances.

Note: When the observer cannot understand what may be a word or multiple-word utterance, score the highest category that can be understood. For example, code "da ba da" as a vocalization. Code "na na na ball" as a word (ball). Code "Mama, I want the ba da ba da" as a multiple-word sentence. In some cases you can use the context to determine what a child has said. For instance, if a child says, "goggy" and points to a dog, this will help you determine that the child intended to say "doggy". Again, if the child points to yellow and says, "yeyow" or "lello", you can code the child's word as "yellow." However, if a child says something you do not understand, but the adult seems to recast or imitate what the child says, do not use these imitations or recasts, or any other adult response to infer what the child is saying. For example, if the child says something that is not at all understandable and does not sound like milk or bottle, and the caregiver says, "You want milk?" you should NOT assume the child said milk or bottle merely based on the adult response.

If the child is reciting numbers or the alphabet, and you can only understand a few letters or numbers, score the ones you are able to understand as words. Do not score letters and numbers as words unless you understand them or they are clear approximations of the letter or word (i.e., "tree" for "three" can be scored as a word, but "ee" for "three" would be scored as a vocalization, but not as a word).

Notes:

Observations when Child is in a Group: If caregiver talks to the whole class, including the target child, the language should be coded as if it were directed to the target child unless the

child is clearly not attending (e.g., on other side of room being changed or playing with peer away from caregiver).

Note: If a caregiver uses a single word or phrase repetitively, discrete occurrences of the language are recorded if there is a 3 second pause between the words/phrases, if the caregiver takes a breath between words/phrases, or if the caregiver varies the language within the phrase.

Examples: CG quickly says "Go, go, go" → recorded as a 1 directive

CG says "Let's go..... let's go..... c'mon" → recorded as 3 directives

CG says "Go, go.... (breath) go" → recorded as 2 directives

Adult Singing: Do not code singing unless the singing involves the use of a specific Promoting Communication strategy. For example, "Twinkle, twinkle, little ______" would be coded as a "Fill in the blank" because the adult is using the fill in the blank/time delay category and she happens to be singing. If an adult singing "Eli has a red shirt, red shirt, red shirt, Eli has a red shirt today" that would be coded as one comment/label. If the adult is just singing as song, such as "Mary Had a Little Lamb," this is not coded because no language-promoting strategy is being used. This is similar to when the adult reads a book to the child. Reading words in a book is not coded, but when the adult comments on a picture in the books, asks a question about the story, or utilizes time delay when reading, those are coded as comments, questions, or time delay. Please note if child and adult were engaged in singing in the text box at the end of the environmental items, indicating the approximate length of time spent singing.

Note: If a caregiver calls a child's name, the language should be coded according to its function. For example, if a CG calls a child's name after the child climbs onto the table (in an attempt to tell them to get off the table), the language should be coded as a prohibition. If the caregiver had given the child a one-minute warning before bringing the child to the potty, then after one minute the CG called the child's name from the bathroom, the language should be coded as an instruction (calling the child to come into the bathroom). If the CG calls a child's name to distract the child in order to stop crying, do not code.

C. Environmental Arrangement

Following the observation period, complete the following environmental arrangement items for the whole observation period. When "adult" or "child" is used, the term is referring to the adult(s) and child that are the focus of the observation. If the observation was paused for any reason, do not code activities that occurred during that pause.

Reading and Books

C1. Children's books are accessible

Children's books are accessible to the child during the observation. The books do not need to be located in a particular place in the room, but just need to be accessible to the child. Examples include books placed in a basket on the floor, a low bookshelf in an area where the child may access them, or having several books mixed among the child's toys. Code "no" if there are no books that the child can access, including if only a tablet is accessible and no physical books are accessible. Code "no" if there are books present but the child could not access the books without the adult's help.

C2. Adult looked at books with child

The adult looked at one or more books with the child during the observation. This might involve reading a book to the child, looking at the pictures of a book together, or looking at a book using an electronic reader or tablet/device. The adult must be involved with the child's book activity. Code "no" if the adult simply hands a book to the child and does not look at it with the child, or the child looked at books alone.

C3. Child looked at books alone or only with children

Child read, looked at, or played with one or more books either independently or with other children. Examples might include the child playing with a book while playing with another child, or the child using an electronic reader or looking at a book on a tablet or electronic reader independently or with another child. Score "no" if the child does not handle books.

Social Environment

C4. Adult facilitates social interactions and/or play

Adult supports or facilitates child's engagement in social interactions such as by selecting activities that encourage social and/or interactive play with one or more children. This might include social interaction with one child or multiple children, or facilitating interaction among children in a group activity, such as by commenting on their activities and interactions. This may also include selecting toys or activities in which the adult and child can interact and interacting with the child in that activity. Other examples might include the adult talking and/or interacting with children during a mealtime or other daily routine, responding to child social initiations, and playing with the child. Code "yes" if the adult facilitates interaction between child and self, other adults, or other children. Code a "no" when the adult provides materials

but does not encourage social interaction or engage in play, does not facilitate interactions between children, or misses opportunities to encourage reciprocal interactions

C5. Electronic devices (TV, phone, computer, tablet, AAC device, etc) are primarily used in a manner that facilitates social interaction

If electronic devices (e.g., television, computers, tablets, video games, smartphones) are used by the adult and/or the child during the observation, the adult uses devices in a manner that facilitates adult-child social interaction. The focus of this item is on HOW adults' use electronics or media with the child. This does not include toys that are simply battery powered and light up and make noise (e.g., a play phone or laptop toy that beeps and says letters). Examples of use of electronic devices include the adult and child playing games together on a tablet, watching television, or reading an electronic book on a tablet or reader. Examples for how devices are used to facilitate social interaction then include the adult following the child's lead while talking about a show they are watching together, or the adult and child talking and gesturing about a game on a tablet, or the adult asking questions and commenting as they look at pictures together on the phone. Code "no" if the majority of time spent using electronic devices occurs without social interaction. Code N/A if electronic devices are not used during the observation.

C6. Competing activities are minimal.

Other activities taking place in the observation area **do not interfere** with adult-child social interactions. Examples of competing activities include loud television, loud music, excessive crowding in the home or classroom, and/or loud conversations in the surrounding area which interfere with the ability of the child and adult to engage in social interactions. The television or music can be on, as long as the volume does not interfere with or distract from adult-child social interaction. Focus on how the environment effects social interaction to score this item. Code "no" if competing activities are taking place for more than half of the observation time.

Materials and Physical Environment

C7. Room arrangement and materials arranged to facilitate social interaction between children and adults

Play areas are accessible and organized to facilitate social interaction. Play areas are not overly cluttered and are generally safe and appropriate for young children's play. Multiple toys or materials are provided, and the space is fairly uncluttered and organized. Code "yes" if toys are relatively organized even if they are spread out on the floor (e.g., blocks are spread out, but there is a bin to store them in, and the room is not overly cluttered with other toys). Also code "yes" if the toys are organized and put away, but still accessible to children (e.g., in open baskets or collected in a play space). Code "no" if toys/materials that can engage children and adults together are not accessible to children, or if play areas are so overly cluttered and/or unsafe that it is difficult for children and adults to play and interact.

C8. Child able to access a variety of toys and materials

Child is allowed access to a variety of toys and materials. They do not need free access to all materials or access to other materials at all times throughout the day, but when the current

activity allows, adults provide a variety of toys and materials. This also includes providing toys and/or materials requested by the child, when appropriate. For instance, during free play, there are a variety of types of toys available, such as trucks, blocks, and dress up toys. If the child requests an additional type of toy during this time, and this toy seems appropriate (i.e., child requests dinosaurs and not finger paints), the adult provides this toy to the child. The adult does not need to provide the requested item if it is not appropriate at the time (i.e., paints, glue and glitter, food during free play, or toys and books during lunch). Code "no" if the child has limited access to materials, given the current activity.

Notes on the Observation

At the end of the environmental arrangement items, you will see a page that reads, "Please describe any unusual situation regarding the observation session of the child you just completed:" Use this space to enter notes you feel are important into the text box, including time spent singing, corrections, unusual interruptions during the observation, etc.

Appendix A: Promoting Communication Observation System Data Sheet

The following data sheet is provided as a back-up, when collecting data using the tablet is not possible.

Promoting Communication Observation System Data Sheet

Date:	Observer ID:	Child ID:	Caregiver ID(s):	Intervention Group:	Location:	Program:	Reliability:	Entered:	Checked:
Wave:					Home Center		Primary Reliability		
Length:					Other		None		
A. ADULT/CHILD \$1	RATEGIES	Adult frequency							Total
1. Comments and la	bels								
2. Imitate and expan	d on utterances								
3. Asks open-ended	questions "wh" yes/no								
4. Gives praise and p									
5. Provides opportu	nities for choices								
6. Asks time-delay /									
Fill in the blank qu	estions								
7. Talk to Adult									
8. Talk to Another Cl	nild								
8. Gives directions of	r instructions								
9. Uses disapproval	/ prohibitions								
B. CHILD COMMUN	ICATION	Target child frequen	су						Total
1. Gesture									
2. Vocalization									
3. Word									
4. Multiword senten	ce/utterance								
		•							-

Promoting Communication Observation System Data Sheet

ACTIVITIES OBSERVED

Check All That Apply

ENVIRONMENTAL ARRANGEMENT

DAILY SCHEDULE AND TRANSITIONS 1. Play 1. Adult facilitated transition(s) by announcing changes/directions YES NO N/A 2. Reading 2. Child(ren) experience excessive waiting times between activities YES NO N/A 3. Structured activity (circle, 1:1 time) 4. Routine care (diaper, dress, toilet) READING AND BOOKS 5. Meal / Snack YES NO N/A YES NO N/A 3. Children's books are accessible 6. Outdoor/community activity 4. Adult looked at books with child 7. Other (write in) 5. Child looked at books alone or with peers YES NO N/A SOCIAL ENVIRONMENT 6. Adult facilitates social interactions and/or cooperative play with children and/or adults YES NO N/A 7. Excessive competing activities taking place (e.g., noise, crowding, clutter, too many guests, adult on phone or texting, TV/music too loud) YES NO N/A 8. TV on in background (low to medium volume, even when there are not other excessive competing activities) YES NO N/A MATERIALS AND PHYSICAL ENVIRONMENT 9. Room arrangement and materials arranged to facilitate social interaction between children and/or adults (e.g., play areas or stations set up to facilitate interactions and cooperative play, YES NO N/A multiple or duplicate toys/materials, materials/space is fairly organized) 10. Child able to access a variety of toys and materials YES NO N/A YES NO N/A 11. Media (TV, computer, tablet, etc) used in a manner that facilitates social interaction 12. Physical environment is overly cluttered or unsafe YES NO N/A **NOTES**

Promoting Communication Observation System 2015

Appendix B: Promoting Communication Observational System Log

The following log may be used to keep a log of observations, for observation planning, to track observation completion, and track interobserver reliability.

Promoting Communication Observation System Observation Log

Date	Time	Child ID	Caregiver IDs	Observer ID	Wave	Reliability	Changes	Uploaded
						□Yes		□Complete
						□No		·
						□Yes		□Complete
						□No		·
						□Yes		□Complete
						□No		
						□Yes		□Complete
						□No		·
						□Yes		□Complete
						□No		·
						□Yes		□Complete
						□No		·
						□Yes		□Complete
						□No		
						□Yes		□ Complete
İ						□No		
						□Yes		□ Complete
i						□No		
						□Yes		□ Complete
						□No		
						□Yes		□Complete
						□No		
						□Yes		□Complete
						□No		
						□Yes		□Complete
						□No		
						□Yes		□Complete
						□No		
						□Yes		□Complete
						□No		
						□Yes		□Complete
						□No		
						□Yes		□Complete
						□No		

Appendix C: Observation Table for Certification

The following data sheet is used in practice scoring and scoring to obtain PC-Obs certification.

Observation Table for Certification

Video/Ol	oservatio	n Name:				Date Cod	led:			Coder:				
Comment	Imitate	OpenQ	YesNoQ	Praise	Choice	TimeD	Tlk2Adult	Tlk2OthCh	Directn	Disappv	Gesture	Vocalizn	Words	Multiwds
Video/Ol	oservatio	n Name:				Date Cod	led:			Coder:				
Comment	Imitate	OpenQ	YesNoQ	Praise	Choice	TimeD	Tlk2Adult	Tlk2OthCh	Directn	Disappv	Gesture	Vocalizn	Words	Multiwds
Video/Ol	oservatio	n Name:	YesNoQ	Praise	Choice	Date Coo	led:	Tlk2OthCh	Directn	Coder:	Gesture	Vocalizn	Words	Multiwds
Video/Ol	oservatio	n Name:				Date Cod	led:			Coder:				
Comment	Imitate	OpenQ	YesNoQ	Praise	Choice	TimeD	Tlk2Adult	Tlk2OthCh	Directn	Disappv	Gesture	Vocalizn	Words	Multiwds
Video/Ol	oservatio	n Name:				Date Cod	led:			Coder:				
Comment	Imitate	OpenQ	YesNoQ	Praise	Choice	TimeD	Tlk2Adult	Tlk2OthCh	Directn	Disappv	Gesture	Vocalizn	Words	Multiwds

Appendix D: Sample Log for PC Observation Database Tutorial

Sample Log for PC Observation Database Tutorial

Date	Time	Child ID	Caregiver IDs	Observer ID	Wave	Reliability	Changes	Uploaded
2/16/16	10:33	217	214, 215	1	2	□Yes □ No		□Complete
2/16/16	10:50	219	214, 215	1	2	□Yes □ No	Delete Child Single Word	□Complete
2/16/16	11:07	220	214, 215	1	2	□Yes □ No		□Complete
2/17/16	9:17	215	210, 211	1	2	□Yes □ No		□Complete
2/17/16	9:35	213	210, 211	1	2	□Yes □ No	Delete observation – will take again	□Complete
2/17/16	9:51	216	210, 211, 212	1	2	□Yes □ No		□Complete
2/17/16	10:08	214	210, 211, 212	1	2	□Yes □ No		□Complete
2/18/16	9:15	201	202, 203	1	2	□Yes □ No		□Complete
2/18/16	9:40	261	231, 232	1	2	□Yes □ No		□Complete
2/19/16	9:07	203	201, 203	1	2	□Yes □ No	Too short - deleted	□Complete
2/19/16	9:24	204	201, 203	1	2	□Yes □ No		□Complete
2/19/16	10:58	226	219, 220	1	2	□Yes □ No		□Complete
2/19/16	11:15	225	219, 221	1	2	□Yes □ No		□Complete
2/19/16	11:31	227	219	1	2	□Yes □ No		□Complete
2/22/16	9:12	228	221	1	2	□Yes □ No		□Complete
2/22/16	9:32	262	231, 232	1	2	□Yes □ No	Caregiver3 ID is listed as "1" - delete	□Complete
2/22/16	10:00	263	231, 232	1	2	□Yes □ No		□Complete