



PC-Obs

Promoting Communication Observation System

**Measuring Frequency of Caregiver Use of Communication
Promoting Strategies and Child Communicative Behaviors**



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

This page was intentionally left blank.



PC-Obs

Promoting Communication Observation System

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

Kathryn M. Bigelow
Dale Walker

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

Please use the following citation for this manual:

Bigelow, K.M., & Walker D. (2022). Promoting Communication Observation System (PC-Obs): Measuring Frequency of Caregiver Use of Communication Promoting Strategies and Child Communicative Behaviors. Juniper Gardens Children's Project: Kansas City, KS.

Please use only with permission. For questions, please contact: Kathy Bigelow at kbigelow@ku.edu or Dale Walker at walkerd@ku.edu

version: 7.14.25

©2015, 2022 Juniper Gardens Children's Project

Table of Contents

About this Manual	5
Before you Begin Conducting Observations	6
Observer Certification and Reliability	7
PC-Obs Observer Instructions and Definitions	8
Activity Definitions	10
Adult Talk	11
Other Adult Talk	19
Child Communication	24
Environmental Arrangement	27
Using the PC-Obs Mobile Application	30
PC-Obs Problem Solving	41
Appendix A: PC-Obs Certification Procedure.....	43
Appendix B: Caregiver Video Recording Steps for Remote Observations	44
Appendix C: PC-Obs Data Sheet	45

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](#) (PC TALK) strategies, along with child communication, during naturalistic daily home and classroom activities.

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 strategies that can be used by parents, teachers, care providers, early interventionists, and home visitors. Multiple studies have demonstrated that when used with fidelity, the PC TALK strategies are effective in improving child language outcomes.

The PC-Obs Manual provides definitions and scoring guidance for the PC-Obs adult caretiver and child behaviors, as well as instructions for using the PC-Obs mobile app for data collection.

PC-Obs data collected using the mobile app are uploaded to the [PC-Obs data dashboard](#). See the PC TALK web site for [video demonstrations](#) showing how the PC-Obs data dashboard is used to enter and edit PC-Obs data, as well as generate graph reports (under “Data Tools,” and then “About PC-Observation System”),

Before You Begin Conducting Observations

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

- [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.
 - The PC TALK team will create a project within the dashboard for your program and will set up a primary program manager PC-Obs account.
 - The PC TALK team will also add you to a "test" project for practice purpose.
 - The PC TALK team will need to know which session length will be used for the project (15, 30, 45, or 60 minutes).
 - Watch for a welcome email from "PcOBS" (check your spam folder) and set up your password. If the link has expired, you can simply click "forgot my password" to set up your new password.
- Once your program has access to the [PC-Obs dashboard](#) through the primary program manager account created by the PC TALK team, he or she can add additional projects, centers, observers, and additional program managers (if necessary).
 - There are two levels of access in the dashboard: program managers and observers. When new "user" accounts are created, the program manager will need to determine if the user will be a program manager or an observer.
 - When program managers create new projects, they will need to determine which session length will be used for the duration of that particular project (15, 30, 45, or 60 minutes). The PC-Obs mobile application is set to automatically end an observation based on the duration set-point for the project. Additionally, PC-Obs graphs will indicate if observation times were shorter than duration set-point for the project. For instance, if a project is set for 30-minute observations, the PC-Obs mobile application will end the observation at 30 minutes. Users always have the option of ending the observation prior to that. If a user for the project ends an observation at 20 minutes, an asterisk will note that the observation was shorter on the graph.
- Prior to conducting observations, you must enter Caregivers (parents or teachers), Children, and Classrooms into the PC-Obs data dashboard.
- While the data dashboard is secure and data are password protected, consider using ID numbers or initials, rather than full names, for additional privacy.
- Users/observers should attend a PC-Obs training and achieve interobserver reliability of 85% on PC-Obs prior to data collection.
- View the [PC-Obs instructional videos](#) to better understand how to enter and edit data and generate graphs.

Observer Certification & Reliability

All PC-Obs observers must complete the [PC-Obs Certification](#) process 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, to ensure consistency in scoring over time, and across observers. For a printable overview of this process, download the [PC-Obs Certification Procedure](#) overview, or view it in Appendix A.

PC-Obs Certification Process

- 1) Review the [PC-Obs Manual](#) and become familiar with the PC TALK Strategies.
- 2) Select a video to code from the [Data Tools, on the PC TALK website](#). You will see links to the PC-Obs Certification Scoring Videos. Use Videos 1, 2, or 3 to become accustomed to the app and practice scoring and use the remaining videos to establish reliability.
- 3) Prepare your device (phone or tablet) for observation. Open the PC-Obs App and enter the required information. Select “test” caregiver and child identifiers.
- 4) Press **Start Timer** in the PC-Obs App before pressing play on the video.
- 5) Code videos 4, 5, 6, 7 to check interobserver reliability. Please note that if you observe the videographer talking, code that individual 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.
- 6) Once the 15 min observation period ends, complete the Environmental Arrangement questions, and then press “Next”. You can leave “Notes” blank. Click Next again and you will see a summary of the observation data. Take a screenshot using your device’s screenshot function.
- 7) When ready to check scores, enter the scores into the Microsoft Excel PC-Obs Certification Calculator under the “Enter Totals Here” sheet. Download a copy of the excel calculator here: <https://talk.ku.edu/certification/>
- 8) After entering scores, click on the “Reliability Results” sheet within the Microsoft Excel PC-Obs Certification Calculator to check progress.

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.

PC-Obs Observer Instructions & Definitions

Observer Instructions: Preparing for the Observation

PC-Obs observations may be conducted in-person or remotely. For guidance on the logistics and tools needed in conducting observations remotely, please refer to Appendix B.

Observations may be conducted with one caregiver and a child, such as at home, or with one child and the teacher or teaching team who interact with that child in a center-based program. In a classroom setting, this allows you to collect PC-Obs data on one child's language experiences within the classroom. By coding all adult talk directed to, or in the close proximity to a focal child, you are better able to understand that individual child's language environment.

Observing at Home: When conducting an observation at home, generally observations are conducted with one caregiver interacting with one focal child. Code the frequency of that one caregiver's use of the PC TALK strategies, as well as Other Adult Talk, and Child Communication.

Observing Classrooms: When conducting observations in a classroom setting, observations can be conducted with (1) an individual child and an individual teacher, or (2) an individual child and any teacher who interacts with that child during the observation period. This approach allows you to collect data to represent the language-learning environment for one focal child at a time.

Caregiver and child behavior are 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. Then, the data will be uploaded to the online PC-Obs Data Dashboard.

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. Any activity in which the child and caregiver(s) engage together can be a setting for a PC-Obs observation. Observed activities might include play, book reading, structured activities (i.e., art, circle time), routine care (i.e., diapering, handwashing, dressing), meals or snacks, or outdoor/community settings.

Identifying the Observation: Prior to beginning the observation, select the appropriate responses from the pull-down menu to identify the project, caregiver, child, location (i.e. home or center), observation wave (i.e., session 1), observer type (primary or reliability), and starting activity to select the activity in which the adult and child are currently engaged.

Prepare to Observe: Click "Start" to begin coding. The timer will begin as soon as you click "Start."

Observe: During the observation time, record each strategy used by the caregiver by clicking on the respective blue button. Score according to the behavioral definitions provided in this manual. You will also code “Other Adult Talk,” (i.e., talk to other adults, directions, etc), and “Child Communication,” (i.e., gestures, vocalizations, word, multi-words)

Following the observation period, complete the Environmental Arrangement questions. Any information you observe that is pertinent to the observation or to help coaches interpret these data can be logged in the “Notes” section after the observation. 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.

Uploading Data to the PC-Obs Dashboard: If your mobile device has a data plan, or is connected to Wi-Fi, such as within a school, the data will automatically be uploaded to the online PC-Obs data dashboard once you click “Post Data.” If you anticipate conducting an observation without Wi-Fi or data, such as during a home visit or in a rural area, your data will be stored by the app until you return to a location with Wi-Fi. Before you leave for that location, be sure you are logged into the PC-Obs mobile app. Then, after conducting the observation, when you return to a location with Wi-Fi, open the PC-Obs app on your device and click the blue “Sync Data” button and the data will then automatically upload to the PC-Obs data dashboard.

You may collect as many observations as you wish before sending your observations to be uploaded to your database, but we recommend uploading as often as possible, such as at the end of the day or after 1 week. When you are ready to upload your observations, simply connect your device to the internet via Wi-Fi and click the “Sync Data” button.

Conducting Observations without the Mobile App: PC-Obs data may be collected using a hard-copy of the PC-Obs data sheet when your device has run out of power or is not functioning. The data sheet can be found in Appendix C. Once you complete the observation using the data sheet, you can then hand-enter the subtotals for each category into the PC-Obs data dashboard. See the PC-Obs video demonstrations for how to go about entering the data by hand.

Observer Instructions: Observation Definitions

Activity Definitions: Throughout 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 engaging with books independently 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	Comments
Definition: Caregivers provide comments, descriptions, or names related to people, activities, actions, and objects to which the child is attending. Commenting and labeling may include: • Describing what the child or adult is doing • Commenting on a shared activity, object, or situation • Labeling or naming items or actions • Commenting or labeling actions, materials, etc. in the context of pretend play	
Examples of Comment and Label • <i>“You are pushing the car back and forth.”</i> • <i>“We are eating our oranges and carrots!”</i> • <i>“I am going to help wipe your nose.”</i> • <i>“That seems to make you happy!”</i> • <i>“I am swimming in the ocean” while pretending to be fish.</i> • <i>“Look at you jumping so high!” or “Look at all those beautiful colors!” (when not about directing child’s behavior, but commenting on their shared attention)</i> • <i>“One bear, Two bears, Three bears” (pointing to each bear individually; coded as 3 Comments). *</i> • <i>“A, B, C...” (singing the alphabet song while pointing at letters in a book) (coded as 1 Comment) *</i>	
Decision Rules	
Utterances that would be coded Commenting and Labeling, but also have a question intonation are coded as Comment and Label. • <i>“I wonder what you will do?”</i>	
In the context of pretend play, if a caregiver comments on within the context of pretend play but is not explicitly providing a direction related to the child’s own behavior or pertinent to the child’s actions “in real life,” this direction would be coded as a Comment and Label. • <i>“Fly like an airplane!”</i> • <i>“Come to the barn, Farmer Joe.”</i> If the direction is related to the child’s own behavior, not in the context of pretend play, it would be coded as Directions, Instructions, or Requests for Language (<i>Directn</i>). • <i>“Come here and put the Farmer in the barn.”</i>	
Expressions such as <i>“Wow! Whoa!” “Mh-hm,”</i> and <i>“Uh huh,”</i> <u>are not</u> coded.	

Comments unrelated to child's current activity, attention, or interest <u>should not</u> be coded as Comment and Label . Ex: While the child is playing, the caregiver gets up and says, " <i>I need to get some work done</i> " to herself. This is not coded because it is not following the child's lead.
Positive statements about other people and activities are coded as Comment and Label . • "<i>That's nice of him to do that.</i>" in response to one child handing the child a toy.
When an adult is reading a book with the child, the adult reading the text that is already in the book <u>is not</u> coded; however, if the adult describes any of the text or adds information about the book, that would be coded as Comment and Label (Ex: Commenting on the actions of a book character).
* Reciting or singing ABCs or 123s such that each letter or number is identified or referred to separately, such as counting blocks or other objects individually or identifying letters on a poster individually – each letter or number is counted separately. For example: If the caregiver says, "A" (points to A), "B" (points to B), etc., each letter is scored as one Comment and Label. Additional examples: • If the caregiver labels and points to each letter of the alphabet, this would be tallied as 26 Comment and Labels. • If the caregiver says, "<i>One, two, three, four, five, you have five toes.</i>" (While pointing to each toe), this is coded as 6 Comment and Labels (one for each number and one for "you have five toes.")

A2. Imitate and/or Expand

Imitate

Definition: Caregivers imitate and/or expand upon the child's utterance by repeating what the child says (imitate) or by adding additional information to what the child has said (expand).

- Repeating that adds content to a child's utterance
- Modeling grammatical form to an immediately preceding utterance
- Imitating or repeating the child's vocalization and/or utterance

Examples of Imitate and/or Expand

- Child says, "*Baby*" and Caregiver repeats, "*Baby.*"
- Child says, "*tummy*" and Caregiver says, "*Yes that's tummy, or stomach.*"
- Child says, "*Baa*" and Caregiver says, "*Bottle, here is your bottle.*"
- Child says, "*I want*" and Caregiver says, "*You want that*" or "*You want your blanket.*"
- Child says, "*Clouds*" and Caregiver says, "*Yes, those are clouds in the sky.*" (expansion)
- Child says, "*Up?*", and Caregiver says, "*You want up please*", or "*You are going way up high*" (expansion)

Decision Rules

Clarifications or adding more complex grammar to what the child said are coded as **Imitate and/or Expand**.

- Child says, "*Truck*" and Caregiver says, "*Yes, that is a blue truck.*"

Question inflections should be coded as **Imitate and/or Expand** if the caregiver is imitating or repeating the child's utterance in a question inflection asking for clarification or confirmation. Utterances with question intonation that do not repeat the child utterance with question intonation should be coded **Comment and Label**.

- Child says, "*That red,*" and Caregiver says, "*That's red?*"

A3. Open-ended or “wh-” questions	OpenQ
Definition: Caregiver asks open-ended questions (e.g., “What do you see?”, “Who...”, “When...”, “Why...”, “How...”). Open-ended questions are questions for which the response is more than a yes or a no answer which may include: • “who”, “what”, “when”, “where”, “why” and “how” questions • A one-word response that is more than yes or no answer questions	
Examples of Open-ended or “wh-” questions • Caregiver asks, “<i>What is that?</i>” and the child replies, “<i>Sun</i>” • “<i>Where’s your nose</i>” • “<i>Why did the fish feel sad?</i>” • “<i>How old are you?</i>” • “<i>What do you want to do?</i>” • “<i>What do you like?</i>” • “<i>What’s the weather like outside?</i>”	
Decision Rules When the adult did not hear what the child said and is asking the child to repeat him/herself, code as an Open-ended or “wh-” question. • “<i>What?</i>” or “<i>huh?</i>” • “<i>They’re riding what?</i>”	
When the caregiver is reading a book with the child and the caregiver asks questions that <u>are NOT</u> already in the text of the book, each question is coded as Open-ended or “wh-” questions (OpenQ).	
Forced choice questions, asking the child to indicate a choice, should be coded as Choices, <u>not as Open-ended or “wh-” questions</u>. Ex: “Do you want apple juice or milk?” or “Should we play with blocks or puzzles? However, when the caregiver poses a question in the form of “is it this or that” and there is a definitive correct answer to that question (e.g., “Is that a shoe or a sock?”, this should be coded as Open-ended or “wh-” questions (OpenQ). • “<i>Is this a white or a black shirt?</i>” while the caregiver is showing a black shirt. • “<i>Is that a dog or a cat?</i>” while looking at a cat.	

A4. Yes/No Questions	YesNoQ
Definition: Yes/No questions are questions that would be answered with only a “yes” or “no.” Yes/No Questions may include: - Any question that can be answered with “yes” or “no” - Requests for language that are phrased as a “yes/no” question	
Examples of Yes/No 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?” “Can you say ‘baby’?”	
Decision Rules	
A two-part question with a pause between that may afterward seem like a choice should be coded as Yes/No Questions. “Do you want to go to the store?” pause “Or do you want to go to the park?” would be coded as two Yes/No Questions.	
A question that does not have the complete syntax of a question but is implied in the sentence by having an inflection at the end should be coded as Yes/No Questions. “You got it?” “You want the ball?” “You do?”	
A statement, converted to a question with the addition of a tag, such as “don’t you?” or “isn’t it?” should be coded as Yes/No Questions. - They had a lot of fun, huh? - Its cold today, isn’t it? - You want this, don’t you?	

A5. Praise, Prosocial, and Positive Feedback	Praise
Definition: Caregivers use praise or positive feedback, including compliments, greetings, or other prosocial utterances. Praise and positive feedback may be general or specific (Ex: “<i>good job</i>,” “<i>good deal</i>,” or “<i>I like the way you stacked those up</i>”.) Positive feedback may include positive compliments, greetings, or prosocial statements directed at the child (Ex: “<i>You look nice today in that red shirt</i>,” “<i>You are being a great helper today</i>,” “<i>Wow! Great job</i>.”.) Prosocial comments may include “Thank you,” “You are welcome,” and “Bless you,” and greetings may include “Good morning sweetie” or “Hi Karina.”	
Examples of Praise, Prosocial, and Positive Feedback • Praise and Positive Feedback ○ “<i>I like how you are sharing the crayons so nicely.</i>” ○ “<i>You are sitting quietly.</i>” ○ “<i>You put your coat on all by yourself.</i>” ○ “<i>Great job cleaning up.</i>” (<i>The caregiver compliments behavior</i>) ○ “<i>Wow</i>” ○ “<i>Good</i>” • Prosocial statements, greetings, or compliments ○ “<i>Thank you</i>” ○ “<i>You are welcome</i>” ○ “<i>You love me; I love you too.</i>” ○ “<i>You are my sweetie.</i>” ○ “<i>You look very handsome today.</i>” ○ “<i>Hello (child’s name)</i>”	
Decision Rules	
Affirmations are coded as Praise, Prosocial, and Positive Feedback • “<i>Oh, good.</i>” • “<i>Oh, good deal.</i>” • “<i>All right.</i>”	

A6. Choices	Choice
Definition: Caregiver presents a choice to the child, providing opportunities for the child to communicate their preference or selection. Choices should be explicit and could be verbally or visually presented. Choices may include: • Verbal presentation of choices • Choices presented by non-verbal communication method including signing	
Examples of Choices • “<i>Shall we paint with the red paint or the green paint?</i>” • “<i>Do you want to sing Old MacDonald or Twinkle Twinkle?</i>” • “<i>Would you like to play, or would you like to eat hay?</i>” • “<i>You can have milk or water.</i>” • Caregiver visually presents two choices of toys in each hand and says “Which one do you want?”.	
Decision Rules If questions are rephrased in a subsequent utterance to become more specific, code two utterances, as Questions and providing Choices. Ex: Caregiver asks, “<i>What do you want to drink? Do you want apple juice or milk?</i>” would be one instance of an Open-ended Question (OpenQ) and one instance of Choices (Choice).	
During play, the caregiver provides the child with opportunities to choose one activity out of many. Ex: When caregiver states that the child can choose one of four centers to play in, or one room or activity, one 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. However, if the foods (or toys) are all just placed on the table and the child can take any of them, this <u>should not</u> be coded as Choice. • “<i>You may choose chocolate chip or peanut butter.</i>” During reading time, the caregiver asks the child to select the book to be read from two or more books. The caregiver gives the child a choice between reading the book with the caregiver or reading individually.	
Simply asking what the child wants is not a Choice. This would be coded as an Open-ended Question (OpenQ). “<i>What do you want?</i>” should be coded an Open-ended Question (OpenQ).	
During pretend play, the caregiver provides the child with choices of creating a play scenario. Ex: When taking the toys outside the toy castle, caregiver asks the child if the outside is hot or cold. Ex: “<i>Is the weather outside hot or cold?</i>”	

A7. Time Delay	TimeD
Definition: Caregiver uses time delay or “fill in the blank” by inserting a pause either before or inside of an utterance to the child. Time delay may include: • Pausing briefly after presenting a toy to a child to wait for the child to ask for assistance to work with the toy. • Inserting a pause to let the child fill in the missing word(s) after beginning a familiar rhyme or story.	
Examples of Time Delay • “<i>These are your arms; These are your.....</i>” (waiting for the child to say fingers as the teacher is pointing to the child's fingers.) • “<i>Here is the....</i>” (while looking at a book of animals, the teacher might point to the tiger to give the child the opportunity to say “<i>Tiger.</i>”)	
Decision Rules Utterances may start with other PC TALK strategies (Ex., Comment and Label, Open-ended questions.) Code only the sentences or phrases in which time delay occurs as Time Delay. • “<i>This one is green and that one is...</i>”	

OTHER ADULT TALK

A8. Talk to Other Adult(s)

Tlk2Adult

Definition: Caregiver who is currently interacting with the target child, or in closest proximity, is talking to adults. **Talking to other adult(s)** may include:

- Having discussions on classroom planning
- Coordinating ongoing activities or care
- Talking unrelated to child or classroom activities (Ex: Social talk)
- Talking on the phone (Ex: Cell phone and classroom phone)

Examples of Talk to Other Adult(s)

- *"She has mommy's fascination with tornados"*
- *"Usually, he can count to at least 10"*
- *"Does your program go out to Gardner?"*
- *"Can you change his diaper for me?"*
- *"He'll be napping after 10 minutes."*

Decision Rules

*A longer utterance consisting of two sentences counts as two behaviors in this category. In other words, code each utterance or sentence as one instance of **"Talk to Other Adult(s)."** Ex: *"Did you change Ethan's diaper? He seems fussy"* is counted as 2 behaviors in **Talk to Other Adult(s)** category.

A9. Talk to Other Child(ren)

Tlk2OthCh

Definition: Caregiver talks to other children and the talk is not directed to the target child regardless of content or topic. **Talk to Other Child(ren)** may include:

- Talk that is directed to a child that is not the target child
- Talk that is directed to a group of children that does not include the target child

Examples of Talk to Other Child(ren)

- “Do you want to play with us?” (directed at non-target child)
- “What is this shape called?” (directed at a group of children during circle time, and the target child is not sitting with the group)
- “Are you hungry? What did you have for breakfast?” (counted as two behaviors in this category, when directed at a child who is not the target child)

Decision Rules

*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 Child(ren)**.

- “What is this shape called?” (directed to a group of children during circle time and the target child is sitting with the group) would be coded as **Open Ended Question**.

*A longer utterance consisting of two sentences counts as two behaviors in this category. In other words, code each utterance or sentence as one instance of “**Talk to Other Child(ren)**.” Ex: “Are you hungry? What did you have for breakfast?” is counted as 2 behaviors in **Talk to Other Child(ren)** 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

Definition: Caregiver provides **Directions, Instructions, or Requests for language** to the target child. This includes directions that are given in a positive, neutral, or negative tone. Ex: “*Stack this block*” during play, and “*You sit down!*” in a scolding tone are both coded here. This may include:

- Instructing or directing a child do some action.
- Instructing the child to say something or to vocalize.

Examples of Directions, Instructions, or Requests for Language

- “*Let’s pick up the toys and put them in the bin.*”
- “*Say you are sorry to her.*”
- “*Sit over there.*”
- “*Say ‘truck’.*”
- “*Do it for me.*”
- “*You need to come with me to the bathroom.*”

Decision Rules

Directions, instructions, or requests for language that are given in positive, neutral, negative, or scolding tones are coded as **Directions, Instructions, or Requests for Language**.

- “*You get over here now!*”
- “*Give that to me now!*”

Two-part instructions are coded as one **Directions, Instructions, or Requests for Language** if they are contained within one utterance.

- “*Pick up the books and stack them here.*”

Utterances used to discourage certain child behaviors would be coded as **Directions, Instructions, or Requests for Language**.

- “*It’s not your food.*”
- “*That’s not safe.*”

In the context of pretend play, if the caregiver provides a direction related to the child’s behavior, and it was not a comment embedded within the context of pretend play, it would be coded as **Directions, Instructions, or Requests for Language**.

- “*Come here and put the Farmer in the barn.*” is a **Direction, Instruction, or Request for Language**.
- Within pretend play, statements related to play, such as “*Fly like a bird*” or “*Come to the barn, Farmer Joe*” are **Comments**

Directions, Instructions, or Requests for Language may be used with another PC TALK strategy. Code each strategy separately.

- “*Say you are sorry to her right now; you don’t bite your friends!!*” said in an overly harsh manner while standing over the child and pointing. “*Say you are sorry to her right now*” is coded as one **Directions, Instructions, or Requests for Language**, and “*You don’t bite your friends.*” is coded as one **Disapproval, Prohibition, Negative Talk** even though these two sentences run together when the caregiver says it.

Utterances that include a child’s name as a way of directing them to do something coded as **Directions, Instructions, or Requests for Language** because the caregiver had already given a general direction to the child and says a child’s name as a way of directing them to do something.

- “*Alex, go get your coat.*”

Utterances that include a child’s name to have them stop doing something would be coded as **Disapproval, Prohibition, Negative Talk**.

- “*Alex!*” (when the caregiver wants the child to stop kicking the wall.)

- “Kai! Stop that!”

A11. Disapproval, Prohibition, Negative Talk

Disappv

Definition: Caregivers use disapprovals, prohibitions, or negative talk directed to the infant/child that indicates that the child should stop some activity or to stop saying something or is negative or harsh in content. The negative talk includes:

- Comments or questions that criticize, belittle, or shame the child or that are sarcastic
- Comments or questions that indicate that the child is doing something on purpose to make the Caregiver angry
- Comments or questions that is said in an angry, harsh, or frustrated tone of voice or with a negative affect and/or negative nonverbal behavior.
- Caregiver statements referring to disciplinary actions.

Examples of Disapprovals, Prohibitions, or Negative Talk

- **Disapproval**
 - “I don’t like it when you hit.”
 - “You make me so angry. You need to listen.” (Disapproval, or Negative Talk)
 - “I’m not playing this game.” (in response to child misbehavior)
- **Prohibitions**
 - “No!”
 - “Get away from here.”
 - “Quit saying that.”
 - “You better not think about doing that!” (as the child is about to do something the adult does not want the child to do).
- **Negative Feedback or Negative Talk**
 - “You are not a nice girl today.”
 - “You’re whining again.”
 - “Mommy doesn’t want to play with you anyway.” (sarcasm)
- **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 take those away.”
 - “You’re getting a spanking.”

Decision Rules

Caregiver says the child’s name in a tone indicating they want the child to stop doing something. This should be coded as **Disapproval, Prohibition, Negative Talk** (*Disappv*).

- “Alex!”

*There could be instances where the caregiver says the child’s name to have them stop doing something and other times when the caregiver says the child’s name to have them do something. Ex: “Alex” to tell the child to go get the child’s coat. In the second example, this would be coded as a **Directions, Instructions, or Requests for Language** (*Directn*).

When child asks to go to the bathroom and caregiver responds with frustration and displeased facial expression. This should be coded as **Disapproval, Prohibition, Negative Talk** (*Disappv*).

- “Didn’t you just go?”

Caregivers state how much they dislike the way certain children are acting.

- *“Once again Jane is not sitting in her chair!”*

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,” “mmm,” “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

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

Examples of Gestures

- 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

Definition: A non-word verbal utterance voiced by the child may be directed toward a partner or to themselves. Vocalization includes:

- Episode (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 (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 second vocalization. If they take just a quick little gasping breath and keep laughing at the "same" thing, this counts as one vocalization.)
- Crying should not be counted as vocalizations.

Examples of Vocalization

- Animal sounds, "moo" when looking at a cow. Giving or showing objects
- Transportation, motor sounds, "vroom" when pushing a tractor
- Blows to ask for more bubbles
- "ah", "da", "eee", "mmm", or "umm."
- Laughing at the play partner's actions.

B3. Words	Words
Definition: Single-word utterances voiced by the child that are understood.	
Examples of Words	
• “Car”, “mailbox”, “necklace” • Continuous sequential repetition, “go go go” (code only one) • Two-part proper names, “Big Bird”, “Mary Jane” • Sequentially describing or naming objects, “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.	
B4. Multiple-word utterances	Multiwds
Definition: 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 of Gestures	
• Words should fit together in a meaningful way, “<i>big truck</i>” • Does not need to be grammatically correct, “<i>Me go to store.</i>” • Does not need to have adult meaning, “<i>Cow rides tractor</i>” • Standard sign language, code as appropriate for multiple-word utterances.	

Notes:

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).

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).

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’mom” → 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. Then, code that 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.

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 (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 to stop crying or for other reasons that are not clear from the context, 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 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 playing games 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, 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.

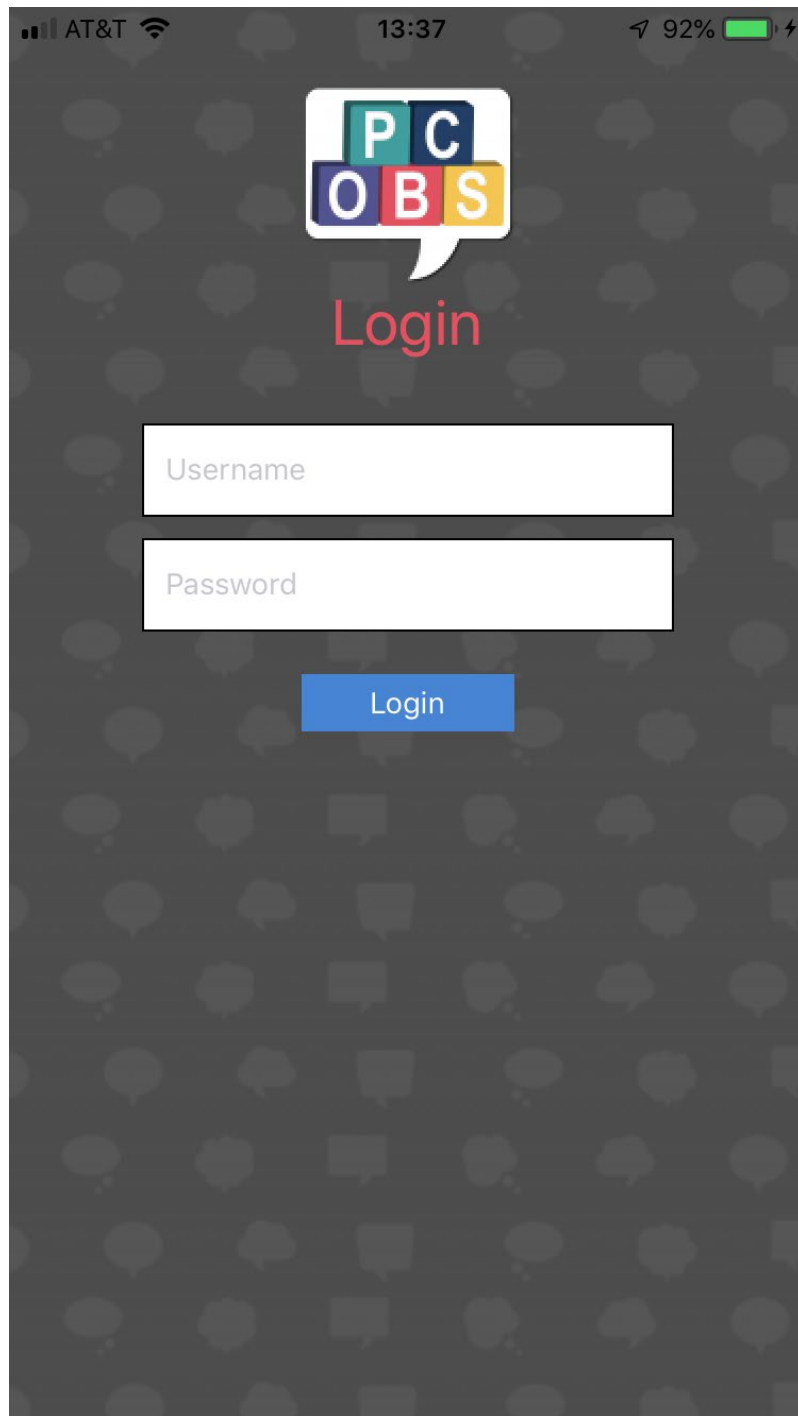
C8. Child able to access a variety of toys and materials

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

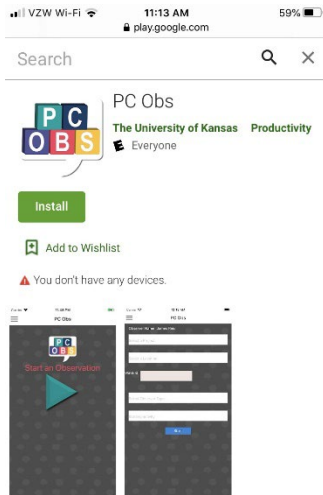
At the end of the environmental arrangement items, you will see a Notes field. Use this space to enter information important to understanding or interpreting the observational data, such as non-typical classroom activities (i.e., classroom visitor or party), child falling asleep, teacher leaving the classroom, or information about the activity or context that might impact data interpretation (i.e., child chose to play alone, challenging behaviors, teacher practices to highlight). You may also add notes about coding questions, unusual interruptions during the observation, or corrections that should be made in the database.

Using the PC-Obs Mobile Application

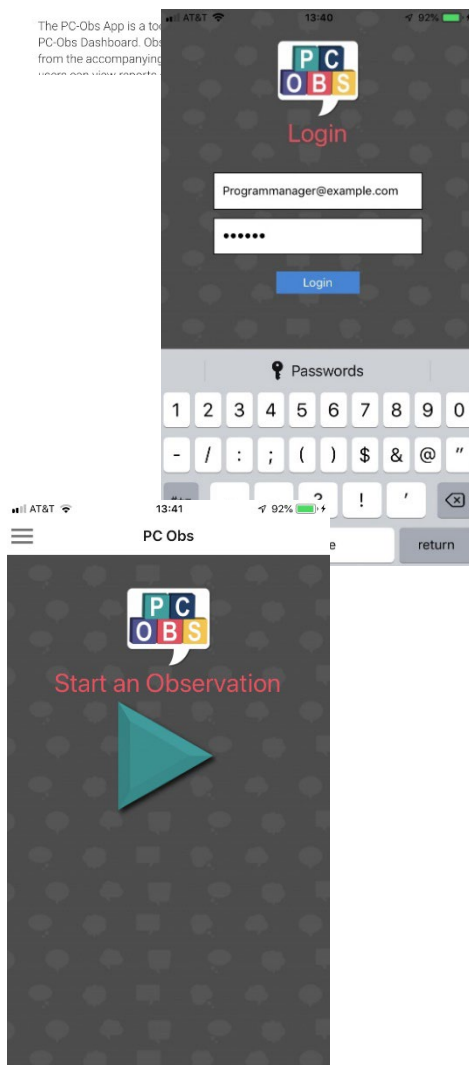


Download App: Using the PC-Obs System App

Download App & Login



1. 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.

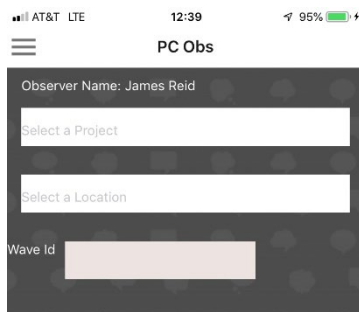


2. Once the app is finished downloading, open the app and enter Username and Password and then click “Login.”

3. Click the green arrow to enter session information.

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.



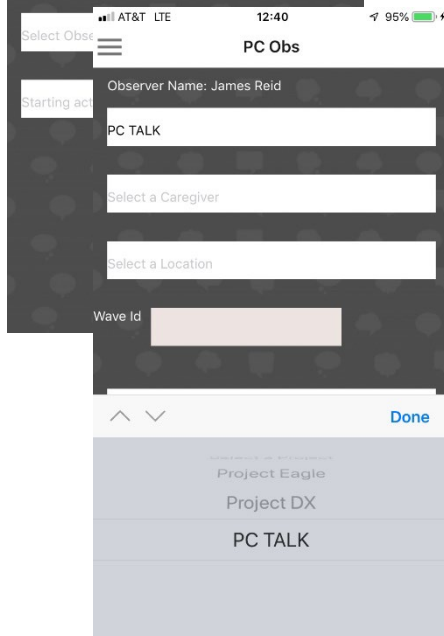
Observer Name: James Reid

Select a Project

Select a Location

Wave Id

1. Prepare to enter session information.



Select a Project

Observer Name: James Reid

PC TALK

Select a Caregiver

Select a Location

Wave Id

Project Eagle

Project DX

PC TALK

2. Select a **Project** - pull down the menu and select a project from the list shown.

AT&T LTE 12:40 95%

PC Obs

Observer Name: James Reid

PC TALK

LibbySmith

Select a Child

Select a Location

Wave Id

^ v Done

Select a Caregiver

LibbySmith

3. Select a **Caregiver** – pull down the menu and select a caregiver from the list shown. Consider using initials when possible.

Observer Name: James Reid

PC TALK

LibbySmith

EliJones

Select a Location

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

Observer Name: James Reid

PC TALK

LibbySmith

EliJones

Center

Wave Id

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

Observer Name: James Reid

PC TALK

LibbySmith

EliJones

Center

Wave Id

Done

Select a Location

Home

Center

6. Enter a **Wave ID** – you may identify the data collection timepoint with a number, letter, or with text.

Observer Name: James Reid

PC TALK

LibbySmith

EliJones

Center

Wave Id

Done

Select Observer Type

Primary

Reliability

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

Observer Name: James Reid

PC TALK

LibbySmith

EliJones

Center

Wave Id

Done

8. Select a **Starting 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.

Observer Name: James Reid

PC TALK

LibbySmith

EliJones

Center

Wave Id

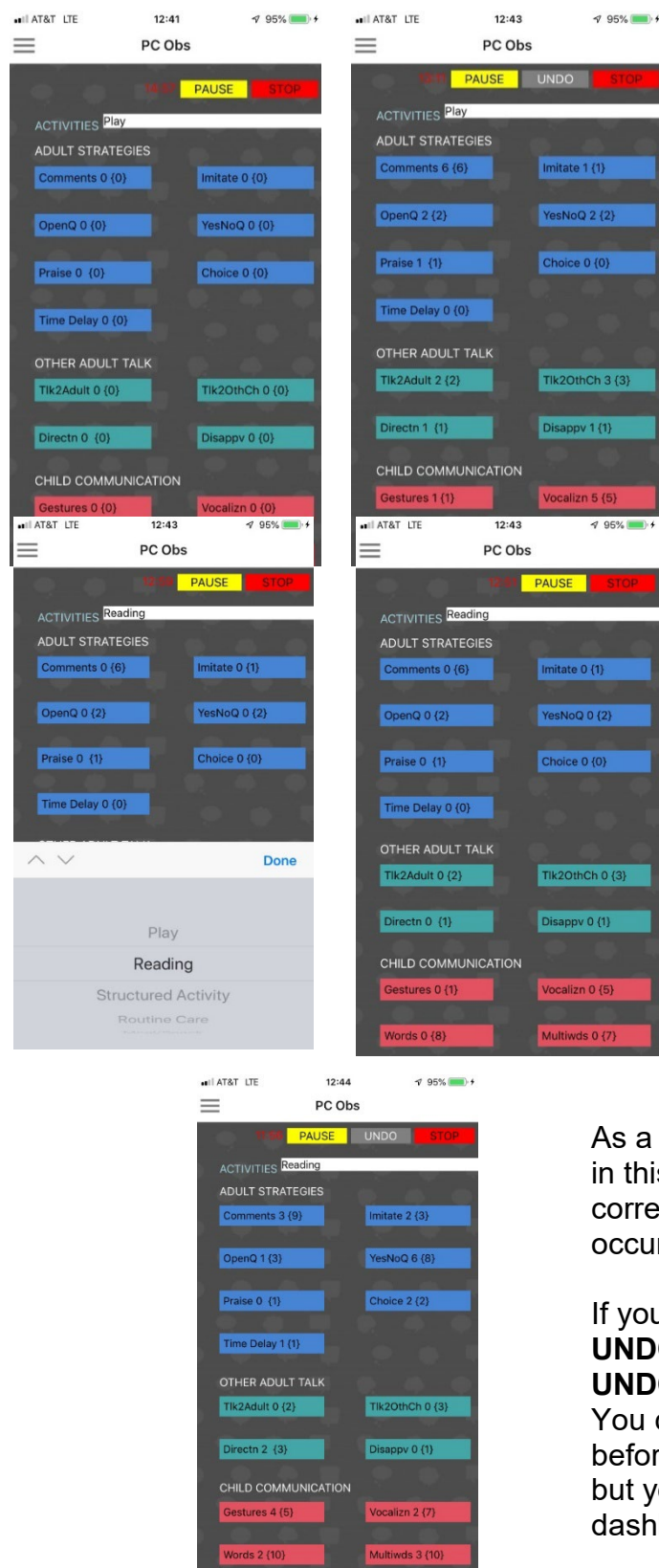
Primary

Play

Start

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

Data Collection – Adult/Child Strategies & Child Communication



The **ACTIVITY** shown will be the **Starting Activity** selected BEFORE starting the timer.

To begin the observation timer, click **Play**. All **ADULT STRATEGIES**, **OTHER ADULT TALK**, and **CHILD COMMUNICATION** buttons will be active, with their corresponding frequencies initially set at 0's.

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

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

If there is a change in activity, pull down the **ACTIVITY** menu to select the new activity, and all frequencies for the current activity will be reset 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.

If you click the wrong button, you may click **UNDO** to delete the last behavior entered. **UNDO** deletes only the last behavior coded. You cannot correct errors that occurred before the last behavior coded in the app, but you may make edits within the data dashboard later.

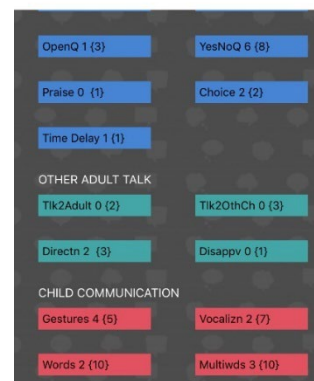
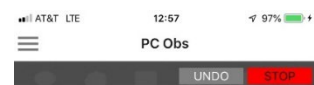
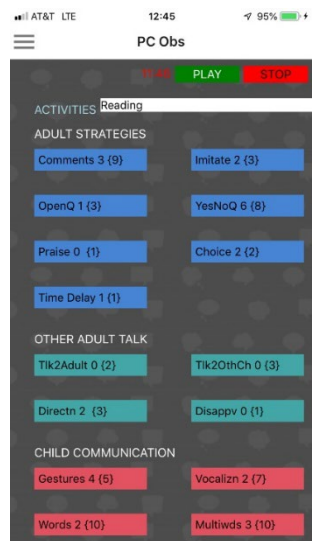
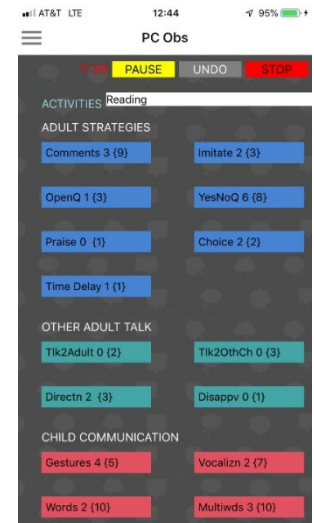
You may use the yellow **PAUSE** button to pause an observation – during this time, the timer stops, and the yellow **PAUSE** button changes to a green **PLAY** button.

All **ACTIVITY**, **ADULT STRATEGIES**, **OTHER ADULT TALK**, and **CHILD COMMUNICATION** buttons will be inactive 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 active 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

The first screenshot shows the 'READING AND BOOKS' section with three items: 'Childrens books are accessible' (Yes selected), 'Adult looked at books with child' (Yes selected), and 'Child looked at books alone or only with children' (Yes selected). Below this is the 'MATERIALS AND PHYSICAL ENVIRONMENT' section with two items: 'Room and materials arranged to facilitate social interaction' (Yes selected) and 'Child able to access a variety of toys and materials' (Yes selected). A blue 'Next' button is at the bottom.

The second screenshot shows the 'SOCIAL ENVIRONMENT' section with three items: 'Adult facilitates social interactions and/or cooperative play' (No selected), 'Electronic devices are primarily used in a manner that facilitates social interaction' (Yes selected), and 'Competing activities are minimal' (No selected). A blue 'Next' button is at the bottom.

There are 3 groups of **ENVIRONMENTAL ARRANGEMENT STRATEGIES** on two screens that are scored with a yes or a no, and one item may be scored “N/A” for not applicable.

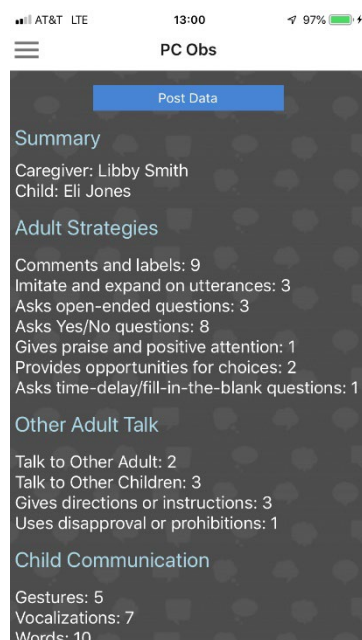
Click the **NEXT** button after selecting your responses on each screen.

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.

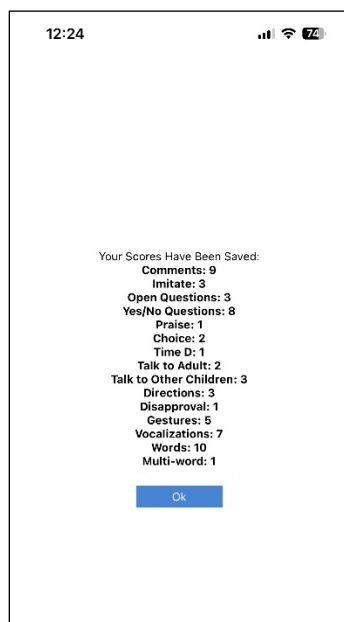
The screenshot shows a screen titled 'Notes' with a text input field and a blue 'Next' button below it.

Completing the Process – Post and Sync Data



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

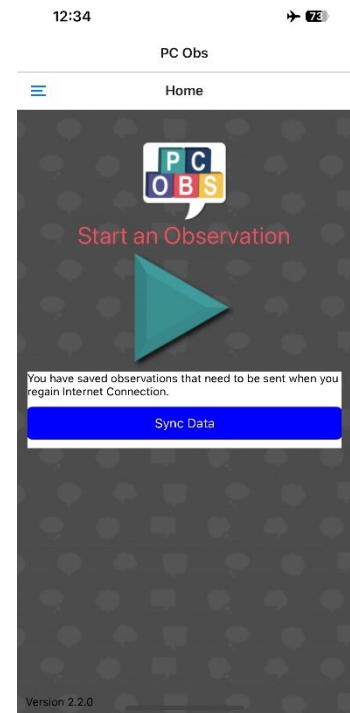
If you are collecting data for the purposes of calculating interobserver reliability data for certification purposes, take a screenshot and hand-enter the totals into the Excel PC-Obs Certification Calculator.



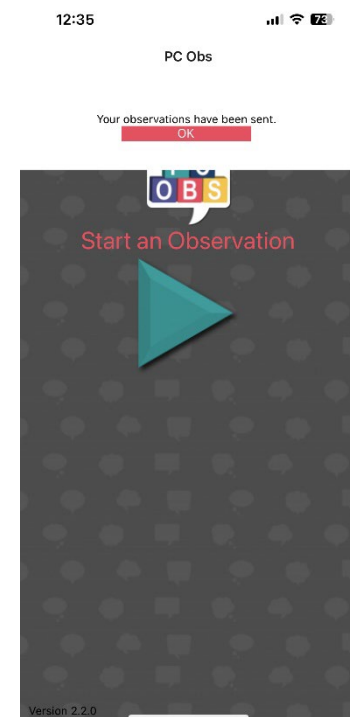
The final screen, after clicking **POST DATA** verifies that the data were uploaded to the dashboard.

If you have collected data “offline” (i.e., without Wi-Fi or data), you will see a note that says “You have saved observations that need to be sent when you regain Internet Connection”, and a blue button that says “**Sync Data**.”

When you return to a location with Wi-Fi, be sure to open the mobile app and click the blue “**Sync Data**” button to upload the data to the dashboard.



You will then see a note that says, “Your observations have been sent.” Click the red button that says “**OK**” to complete the syncing process.



PC-Obs Problem Solving

I conducted an “offline” observation (no Wi-Fi) and tried to sync the data when I returned to Wi-Fi, but the data did not upload to the dashboard. What do I need to do to sync the data from the app to the dashboard?

Occasionally, there may be challenges in syncing the data once the device is back on Wi-Fi. In these cases, once connected to the internet again via Wi-Fi or data, start a new observation. You will discard it later so it should not matter which identifying information you enter. Simply start a new observation, and select any of the data in the identifier fields (i.e., project, location, wave, observer type, and starting activity). Click the teal “START” triangle button. You do not need to enter any data. Once you start the observation, click on the three bars in the top, left corner of the screen, and click “Discard Assessment.” You should find that the data from your actual observations will then sync to the dashboard. You can double-check the data dashboard for these observations. If you do not see the observations in the dashboard, contact the PC TALK team for additional support.

I need to edit or delete an observation.

Data collected during observations (i.e., observation date, strategy use, child communication) can be edited after the observation is complete in the PC-Obs data dashboard. Edits to PC-Obs users, center, projects, classrooms must be edited by the PC-Obs tech support team. Contact the PC TALK team for support if you need to edit the data that are not part of an actual PC-Obs Observation, such as observers, project, or center data.

Appendices

Appendix A: PC-Obs Certification Procedures



PC-Obs Certification Procedure

1. Review the PC-Obs Manual and become familiar with PC TALK Strategies.
2. Download the [PC-Obs mobile app](#).
3. Watch for email from "PcOBS" (check spam) and set up password. Log into [PC-Obs dashboard](#) to check your account.
4. Attend a PC-Obs Training.
5. Practice with [PC-Obs practice videos](#) using the app (select "test" project in app). Start with videos 1-3.
6. Screenshot the Summary page and type your scores in the Excel [PC-Obs Certification Calculator](#) in the "Enter Totals Here" fields. Click "Reliability Results" tab in Excel to see your scores.
7. Continue coding until you've received a score of 85% or higher on 3 videos (from videos 4, 5, 6, 7).
9. After becoming certified, we recommend practicing coding with other certified coders in your organization to confirm site reliability.

Appendix B: Caregiver Video Recording Steps for Remote Observations

The following handout can be shared with caregivers to help them prepare for remote observations. The PC TALK team has successfully used Zoom to record observations remotely. Caregivers will need a device that can connect to Zoom and must be able to place the device in a spot to record that is not distracting. Most caregivers prefer to use their phone; we found it helpful to give caregivers small tripods to help with positioning of their phone for recording.



Caregiver Video Recording Steps



1. Find a comfortable location for 15 min parent- child interaction



2. If possible, make sure that you turn off the television or music to reduce the background noise.



3. Position your camera vertically on your tripod so that both you and your child are in the frame



4. Join the Zoom call by clicking the link in your email or text messages and entering the password



5. PC TALK contact will begin the recording and notify you after the 15 min recording has ended



6. The recording file will be saved on the research team computer

Appendix C: Promoting Communication Observation System Data Sheet

The following data sheets (a blank copy and a completed example) are provided as a back-up, for when collecting data using the PC-Obs app is not possible. Please refer to pages 36-41 of this manual for instructions on how to enter observational data into the PC-Obs dashboard from a paper form.

The dashboard data entry process (to enter data from the paper form) is formatted in a similar manner to how data is collected in the PC-Obs app. In the PC-Obs app, the duration of each activity and the frequency of each adult and child behavior within those activities are collected. However, the PC-Obs graphs and data tables only display the frequency of each adult and child behavior for the total observation. The duration for each activity is displayed on a pie chart. Due to the way data entry is formatted on the dashboard, you will be asked for the duration of each activity as well as the frequency of adult and child behaviors that occur within those activities when you enter data from your paper sheet.

Promoting Communication System Data Sheet (Paper Form)

Observer Name/ID:	Project: Center: Wave:	Caregiver ID:	Child ID:	Location: Home Center Other	Date: Start Time	Obs. Type: ☐ Primary ☐ Reliability	Activity (Duration in min) ☐ Play (____min) ☐ Reading (____min) ☐ Structured (____min) ☐ Routine Care (____min) ☐ Meal Snack (____min) ☐ Outdoor/Community (____min) ☐ Other (____min)	Entered into dashboard? ☐ Yes	
ADULT STRATEGIES		Adult Frequency (Make tally marks for each behavior observed; once a new activity starts, draw a large slash to start frequency tallies for the new activity).							Total
Comments and labels									
Imitate and expand on utterances									
Asks open-ended questions									
Asks Yes/No Questions									
Provides opportunities for choices									
Gives praise and positive attention									
Asks time-delay/fill-in-the-blank questions									
Talk to Other Adult									
Talk to Other Children									
Gives directions and instructions									
Uses disapproval or prohibitions									
CHILD COMMUNICATION		Child Frequency (Make tally marks for each behavior observed; once a new activity starts, draw a large slash to start frequency tallies for the new activity).							Total
Gestures									
Vocalizations									
Words									
Multiwords									

Promoting Communication System Data Sheet (Paper Form)

READING AND BOOKS

- | | | |
|--|---------------------------|--------------------------|
| Children's books are accessible. | ☐ Yes | ☐ No |
| Adult looked at books with child. | ☐ Yes | ☐ No |
| Child looked at books alone or only with children. | ☐ Yes | ☐ No |

MATERIALS AND PHYSICAL ENVIRONMENT

- | | | |
|---|---------------------------|--------------------------|
| Room and materials arranged to facilitate social interaction. | ☐ Yes | ☐ No |
| Child able to access a variety of toys and materials. | ☐ Yes | ☐ No |

SOCIAL ENVIRONMENT

- | | | |
|--|---------------------------|--------------------------|
| Adult facilitates social interactions and/or cooperative play. | ☐ Yes | ☐ No |
| Electronic devices are primarily used in a manner that facilitates social interaction. | ☐ Yes | ☐ No |
| Competing activities are minimal. | ☐ Yes | ☐ No |

NOTES:

Promoting Communication System Data Sheet (Paper Form)

Observer Name/ID: Susie	Project: ECC Center: Wave: /	Caregiver ID: 1004	Child ID: 4-02	Location: <u>Home</u> Center Other	Date: 8.10.23 Start Time: 11:30a	Obs. Type: <u>Primary</u> Reliability	Activity (Duration in minutes): ☐ Play (___ min) ☒ Reading (5 min) ☐ Structured (___ min) ☐ Routine Care (___ min) ☒ Meal Snack (10 min) ☐ Outdoor/Community (___ min) ☐ Other (___ min)	Entered data into dashboard? ☒ Yes		
ADULT STRATEGIES		Adult Frequency (Make tally marks for each behavior observed; once a new activity starts, draw a large slash to start frequency tallies for the new activity).						Total		
Comments and labels									42 meal 23 read	65
Imitate and expand on utterances								7 meal 13 read	20	
Asks open-ended questions		mealtime Reading						8 meal 9 read	17	
Asks Yes/No Questions								4 meal	4	
Provides opportunities for choices								3 meal	3	
Gives praise and positive attention		1						2 meal 1 read	3	
Asks time-delay/fill-in-the-blank questions		1						1 meal	1	
Talk to Other Adult								0		
Talk to Other Children								0		
Gives directions and instructions								3 meal 5 reading	8	
Uses disapproval or prohibitions								0		
CHILD COMMUNICATION		Child Frequency (Make tally marks for each behavior observed; once a new activity starts, draw a large slash to start frequency tallies for the new activity).						Total		
Gestures								5 meal 13 reading	18	
Vocalizations								3 meal 4 reading	7	
Words								0		
Multiwords								0		

©2015 Juniper Gardens Children's Project

Promoting Communication System Data Sheet (Paper Form)

READING AND BOOKS

Children's books are accessible.	☒ Yes	☐ No
Adult looked at books with child.	☒ Yes	☐ No
Child looked at books alone or only with children.	☒ Yes	☐ No

MATERIALS AND PHYSICAL ENVIRONMENT

Room and materials arranged to facilitate social interaction.	☒ Yes	☐ No
Child able to access a variety of toys and materials.	☒ Yes	☐ No

SOCIAL ENVIRONMENT

Adult facilitates social interactions and/or cooperative play.	☒ Yes	☐ No
Electronic devices are primarily used in a manner that facilitates social interaction.	☒ Yes	☐ No
Competing activities are minimal.	☒ Yes	☐ No

NOTES:

Child took nap afterwards - seemed sleepy during observation and not very "talkative"

